

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1017—Vol. XXV.]

LONDON, SATURDAY, FEBRUARY 17, 1855.

[Price 6d.]

**MR. JAMES CROFTS, MINING BROKER,**  
No. 1, FINCH LANE, CORNHILL, LONDON, TRANSACTS BUSINESS IN BUYING AND SELLING, for immediate cash, DIVIDEND MINES, well selected, at the best of any known investments—paying from 15 to 20 per cent. per annum in dividends. The choice of NON-DIVIDEND MINES for speculation requires careful discrimination. Care is taken to transact every description of business connected with the STOCK EXCHANGE at the same rate of commission as charged by the brokers of that establishment.—BANKERS: The Commercial Bank of London.

**REMOVAL.—MR. JAMES LANE** has REMOVED from 33, to 29, THREADENEE STREET, where he continues to DEAL in DIVIDEND LEADING MINES, at the lowest market price.  
MR. LANE is a BUYER OF:  
Wheal Gill, Devon Great Ores, Clifton and Wentworth, South Devon, East Wheal Russell, East Basset, North Basset, South France, Trewetha.

**MR. J. B. BRENCHELEY IS A BUYER OF**  
Mary Ann, Trefayne, Wheal Edward, West Sorridge, Trefayne, Bedford United, Sorridge Consols, East Gannell, North Hingston, and a SELLER OF:  
Alfred Consols, 50 Ladock, 15 Wheal Zion, 5 Trefayne, Bolebrook, 50 North France, 10 South Tamar, 5 South Gannell, Carreg-hova, 10 Trefayne, 10 North Devon, 20 St. Aub. & Grylls, Great Badden, 100 Tremoll, Down, 10 Wheal Arthur, 50 Oubert, Sortt. and Boff, 5 Trefayne, 5 West Providence, 35 Mizon, Drake Walls, 10 Wheal Wrey, 5 Wheal Golden, 50 Rhedol, Finner's-court, Old Broad-street, Feb. 16, 1855.

**MR. W. LEMON OLIVER, STOCK AND SHAREBROKER,**  
23, THREADENEE STREET.  
Business transacted in every description of British and Foreign Mines. (Sworn Broker.)

**ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, No. 3, OLD BROAD STREET, LONDON.**  
MR. HENRY SIBLEY (late Mr. Peter Watson) will at all times give the best information, and also BUY and SELL SHARES on the usual commission.

**MESSES. POWELL AND COOKE, MINING AGENTS,**  
REMOVED TO 4, HERCULES CHAMBERS, OLD BROAD STREET.

**MR. CAREY, MINING AGENT,**  
5, MOORGATE STREET, CITY.

**MR. E. GOMPERS, MINING SHARE DEALER,**  
24, GRACECHURCH STREET, LONDON.

**MR. W. T. RICKARD, F.C.S., ANALYTICAL CHEMIST,**  
Assayer of Copper and the Precious Metals, by Special Appointment of the CHILIAN GOVERNMENT.  
ACORN VILLA, FORD ROAD, OLD FORD, LONDON.  
City Office, 17, Gracechurch-street.

**MR. NEWTON SAMUELSON, F.C.S., ASSAYER AND ANALYTICAL CHEMIST,—3, HACKNEY HEY, LIVERPOOL.**

**MR. FRANCIS RIDGMAN, MINE SHAREBROKER,**  
TAVISTOCK, DEVON.

**MR. T. TYACK, MINE SHAREBROKER, AUCTIONEER, &c.**  
CAMBORNE, CORNWALL.

**MR. W. H. BRUMBY, STOCK AND SHAREBROKER,**  
No. 1, BRIDGE STREET, BATH, is a BUYER in the following MINES: Wheal Zion, Alfred Consols, West Polberro, Wheal Gill, Castle Dinas, Boscawen, South Hingston, and Hingston Down Consols.

**MINES.—MR. GEORGE SPATLEY** begs to RECOMMEND parties seeking profitable investments to make a SELECTION from the following, being convinced that most of them will prove advantageous at present prices:  
Wheal Buller, Wheal Kitty (St. Agnes), Clifton and Wentworth, Nant-ar-Nelle, Riton, Libras, Wood, North Basset, San Fernando, East Caradon, Sorridge, 14

**WANTED.—100 Pounds, 1 Basset, 10 Trefayne, 2 Great Alfred.**  
List of prices, and full particulars of each, together with the value of all shares, will be forwarded on application.—2, Winchester-buildings, London.

**MINING SHARES.—MR. GEORGE SPATLEY** has instructions TO PURCHASE FOR CASH the following SHARES:—  
2 United Mines, 50 Ladock, 10 Sorridge Consols, 1 Boscawen, 1 Condurow, 3 Mary Ann, 3 Trefayne, 10 South Tamar, 2 Wheal Arthur, 5 West Providence, 2 Wheal Reeth, 20 Polberro, 5 Trefayne, 10 Bedford, 10 West Sorridge, 10 East Russell, 7 Trefayne.  
AND TO SELL the following:  
10 Wheal Kitty (St. Agnes), 10 Great Alfred, 5 Clifton and Wentworth, 100 Cwm Darnan, 100 Boscawen, 100 Boscawen, 100 Wheal Golden, 10 East Tamar, 10 Wheal Wrey.  
List of prices may be obtained at 2, Winchester-buildings, London.

**MR. HY. GOULD SHARP HAS FOR SALE OR ANY PART**—  
20 Mollard, 24. 50 North Hingston, 24. 50 Tamar Maria, 50. 50 Grey Mare, 50. 100 North Sorridge, 50. 100 Wheal Surprise, 50. 50 West Sorridge, 40. 100 Riton Castle, 150. 50 Tremoll, Down, 50. 50

**WANTED.—20 Tremoll Consols, Wheal Zion, 50 Wheal Golden, 50 Wheal Wrey.**  
Crosby Hall Chambers, Bishopsgate-street, London.

**MR. R. TREDINNICK** will RETURN to LONDON about the 20th inst., from his MONTHLY VISIT of INSPECTION to the principal mineral districts of Cornwall.—4, Abchurch-lane, Feb. 6, 1855.

**SHARES WANTED.—MR. R. TREDINNICK, BROKER,**  
DEALER IN SHARES, MINE INSPECTOR, AND GENERAL MERCHANT, WANTS SHARES in the following MINES:—  
Alfred Consols, Trefayne, West Providence, Bolebrook, Great Alfred, St. Day United, West Basset, Carnarvon, Condurow, Trefayne Consols, North Basset, Bedford United, South Tamar Consols, Devon Great Ores, Buller & Basset Unit, North Boscawen, North Croft, South France, Carn Brea, South France, West Boscawen, Brynall, Seize, West Alfred Consols.

MR. TREDINNICK also DEALS in every description of Machinery and Materials used in Mining, Engines, Pumps, Candles, Coal, Hemp, Yarn, Rope, Gunpowder, Steel and Iron, &c. &c. &c.  
MR. TREDINNICK is also generally in a position to BUY or SELL in all Dividend and Progressive Mines having an ample capital subscribed, with analogy and proceeds in their favor.  
MR. TREDINNICK'S Synopsis of Cornish and Devon Mining for the past Nine Years forwarded per post upon receipt of 12 postage stamps. General information and statistics given gratuitously upon application personally or by letter.  
4, Abchurch-lane, London.

**MR. JAS. HERRON is a BUYER of the following SHARES:**  
50 Allen, 20 Trefayne, 10 Gannell, 5 Clifton and Wentworth, 2 United Mines, 10 Wheal Wrey, 1 West Caradon, 10 North Robert, 10 East Wheal Rose, 30 Bedford Consols, 2 South Caradon, 30 Sorridge Cons., 30 St. Day United, 10 Graddock Moor, 20 Wheal Edward, 5 Cobbe.  
MR. HERRON is a SELLER of the following:  
100 Mollard, 50 Wheal Norris, 3 Tref. and Bary, 30 Fendren, 100 North Downs, 30 Wheal Pollard, 30 Fendren, 30 Trefayne, 30 Keneggy, 10 Boscawen, 30 Greb, 100 Cwm Darnan, 30 Thomas's United, 5 Pen-y-Gelli, 30 Wheal Harriett, 20 Calington, 30 Trefayne, 5 Wheal Arthur, 10 Gliman, 30 Kibbick, 10 Hingston Down, 1 Mary Ann, 20 Langf. & Baring, 30 Gran. & St. Aub., 30 Tremoll, Down, 100 Korrington, 1 East Darren, 30 Wheal Golden, 5 West Providence, 5 Trefayne, 50 United Mexican, 30 No. Vale of Towy, 5 Tremayne, 10 Brynall, 10 St. John del Rey, 20 Vale of Towy, 10 North Basset, 1 North Pool, 20 Santiago, 50 Cwm Darnan, 5 West Basset, 1 Carn Brea, 20 Inp. Brazilian, 30 Pemb. & Crinall, 5 West Alf. Cons., 5 East Caradon, 20 Alfred Consols.  
Correct prices of the above will be forwarded on application.  
25, Clement's-lane, Lombard-street, Feb. 16, 1855.

**MR. JOSEPH JAMES REYNOLDS, STOCK AND SHAREBROKER, No. 21, THREADENEE STREET, LONDON.**  
BUSINESS TRANSACTIONS in every description of BRITISH and FOREIGN STOCKS, FUNDS, and SECURITIES; also, BRITISH and FOREIGN MINES.

**MR. E. LAMBERT TENDERS HIS SERVICES TO PARTIES** INVESTING in or SELLING MINING PROPERTY. By the soundness of the information to which he has access, and the bona fide character of the undertakings to which he directs attention, his constant endeavours are to secure the support of his clients.—Offices, 3, Hutton-court, Threadeenee-street, City.

**MR. CHARLES D. BUTT** (for five years at the Australian Mining Company's Office, and late at the office of Mr. J. A. Joseph, 3, Winchester-buildings, City) begs to inform his friends and the public that he has COMMENCED BUSINESS as a MINING AGENT and SHARE DEALER, and will promptly attend to any positive orders with which they may favour him.  
Offices, 15, Union-court, Old Broad-street, City.

**MR. EVAN HOPKINS, C.E., CONSULTING MINING ENGINEER.**—MR. HOPKINS may be CONSULTED DAILY by gentlemen and capitalists—who have invested, or may wish to invest, their capital in MINES or MINERAL PROPERTIES—on all matters connected therewith—home and foreign. Also, in every description of METALS, MINERALS, ROCKS, and their commercial value.—NEW PATENTS, &c., so as to make a judicious selection and with a questionable scheme.  
MR. HOPKINS requests his ANNUAL CLIENTS to SEND him their PRESENT ADDRESSES, and a list of the shares, &c., they now hold.  
MR. HOPKINS is now prepared to receive prospectuses and reports on new undertakings, to give his opinion thereon, and to take an interest in and an active part in the London management of any of the legitimate speculations he may recommend to his clients.—38, Thistle-square, Brompton.

**MR. CALVERT** begs to inform the public, or those desirous of turning to good account many poor and, at present, worthless ores, that, when they are tired of the delusion and quackery of gold machines and gold companies, he will be happy to prove to them that there EXISTS in GREAT BRITAIN various ROCKS, VEINS, EARTHS, &c., which may be very cheaply and profitably operated on for GOLD.  
He is willing to take the ACTIVE MANAGEMENT of any mining set that contains sufficient of the precious metal, until it shall be returning profits; and a few have learnt sufficient of the art to be able to carry on the undertaking; but he reserves to himself the right of judging whether there be a sufficiency of the metal to balance the expense of treating the matrix that may contain it.  
Address, 180, Strand.

**MR. ADAM MURRAY, F.C.S., CONSULTING MINING ENGINEER, 75, CORNHILL, LONDON.**

**MR. RICHARD MICHELL'S MINING, AUCTION, AND GENERAL COMMISSION AGENCY OFFICES.**  
FORE STREET, REDRUTH.  
Mines inspected, and information punctually furnished.

**JAMES F. BODDY, No. 16, OLD BROAD STREET, LONDON,** begs to call the attention of his friends and the public to the present DEPRESSED STATE of the MINING MARKET, for INVESTING their CAPITAL in good, sound, MINING PROPERTY, paying regularly from 15 to 20 per cent. on outlay. No other investment offers so great advantages as judiciously selected mining stock. J. F. Boddy transacts business in the undermentioned, or any other mines quoted in the general list of the Mining Journal; and will be happy to forward any information upon application, likewise a correct list of prices:—

Alfred Consols	East Black Craig	Nor. Hingston Cons.	Tremoll Down
Algonid Consols	East Boscawen	Polberro	United Mines
Arundell	Great Coling	Par Consols	West Basset
Baleswidden	Great Polgoth	Phoenix	Wheal Arthur
Bar Holes	Great Polgoth	Polberro	Wheal Basset
Bedford United	Garreg	Pemb. & E. Crinall	Wheal Friendship
Black Caradon	Glennog	Pen-y-Gelli	Wheal Golden
Botallack, Brynall	Gliman	Oakley	Wheal Jane
Bell and Lanarth	Great Sheba Consols	Oola (Limerick)	Wheal Mary Ann
Butterdon	Great Wheal Alfred	Pendron Consols	Wrygan
Carn Brea	Great Bough Tor	Quintrell Down	West Alfred
Comford	Great Sorridge	Rix Hill	West Carnalis
Condurow	Herodston	Rorington	West Polberro
Callington Valley Cons.	Hingston Down Cons.	Howarth Wheal Francis	West Wheal Francis
Dunleavy	Glennog	Rous Hill	Wheal Alfred
Durood	Keneggy	South Caradon	Wheal Lemon
Dolcoath	Kirkcubrightshire	South Tamar	Wh. Mary Gt. Cons.
Drake Walls	Kilraire	St. Aubyn and Grylls	Wheal Trefayne
Devon & Courtney	Marke Valley	Stray Park and Camborne Yean	Wheal Uny
Dev. Bull. Gt. Cons.	Merilay	Sorridge Consols	Wheal Vention
Dinas Great Consols	Min. Co. of Ireland	Sorridge Consols	Wheal Whiligh
Dunleavy	Moss (Bodmin)	Sorridge Consols	Wheal Wrey
East Pool	Mixon Great Cons.	South Bog	Wheal Zion
East Wheal Rose	Mollard	South Carn Brea	West Phoenix
East Basset	Mostyn	St. Hilary	West Sorridge
East Ding Dong	Nor. Wheal Basset	St. Hilary	West Wheal Francis
East Tamar	Nor. Wheal Basset	Trefayne	Wheal Gliman
East Wheal Russell	Nor. Wheal Basset	Trefayne	Wheal Ladock
East Wheal Vyr	Nor. Wheal Basset	Trefayne	Wheal Surprise

**FOR SALE.—10 Wheal Gill, 10 West Phoenix, 30 West Jane, 100 Sorridge, and Bedford, 50 Tremoll, 50 Mollard, 50 Penkalls, 20 Black Craig, 10 South West Phoenix, 20 West Sorridge, 30 Great Wheal Hugo.**  
WANTED.—Sorridge Consols, Bedford United, East Gannell, Boscawen, Corn, Kewick, and others.  
Parties wishing to purchase or sell shares must please state price and number.  
Feb. 17, 1855.

**WANTED.—SHARES in the undermentioned BRITISH MINES.**  
Holders desirous of selling must state the number, the price (which must be low), if under a London management, a committee or not, whether bi-monthly or quarterly meetings, and when last call was made. If the offers are accepted, an immediate settlement, on registration of the shares into the buyer's name.—Applications from some side holders to be addressed, by letter, to "A. B." Mr. T. J. Whizer, solicitor, 16, Essex-street, Strand.  
Great Hewan, South Gannell, Great Oubert, Wheal Golden, Trefayne Consols, Wheal Wrey, North Trefayne, Great Wheal Vor, Rhedol United, Mizon Consols, West Sorridge, South Carn Brea, West Sorridge.

**NOTICE OF REMOVAL.—GEORGE MOORE HAS REMOVED TO**  
No. 1, CROWN COURT, THREADENEE STREET.

**GEORGE MOORE HAS FOR SALE, OR ANY PART:**  
40 E. Russell, 1 Mary Ann, 50 Wheal Zion, 5 North Robert, 1 Grambler, 20 Tamar Consols, 5 Wheal Wrey, 5 Wheal Charlotte, And the following SHARES, at LOWER PRICES than have hitherto been quoted: 10 Alfred Consols, 5 Great Wheal Alfred, 10 North Trefayne, 50 Trefayne Consols, 50 Great Sorridge, 20 Penkalls United, 200 West Sorridge, 300 East Wheal Vor, 30 Great Badden, 50 Sorridge Cons., Business transacted in every description of British and Foreign Mines; and the closest market prices forwarded on application.  
1, Crown-court, Threadeenee-street.

**COBALT AND NICKEL.—ALFRED SENIOR MERRY,** REFINER AND PURCHASER OF COBALT AND NICKEL ORES, AND ASSAYER IN GENERAL.—Address, LEE CRESCENT, BIRMINGHAM.

**NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, MILL STREET, BROAD STREET, BIRMINGHAM.—STEPHEN BARKER** begs to inform the Trade that he has the following articles for sale:—REFINED METALLIC NICKEL, OXIDE OF COBALT, (WIRE, &c.) REFINED METALLIC BISMUTH, GERMAN SILVER—in INGOTS, SHEET, NICKEL AND COBALT ORES PURCHASED.

**GOLDENHILL COBALT, NICKEL, COLOUR, AND CHEMICAL WORKS, NEAR NEWCASTLE, STAFFORDSHIRE.**  
JOHN HENSHALL, WILLIAMSON, MANUFACTURER AND REFINER.  
Reference.—Professor Miller, King's College, London.

**IBBOTSON BROTHERS AND CO., SHEFFIELD, STEEL AND FILE WORKS;** also COMMISSION MERCHANTS for the SALE and PURCHASE of every description of MACHINES and MACHINERY, and every article used by engineers, too numerous to enumerate in an advertisement.

**WANTED, a HIGH-PRESSURE ENGINE,** from 75 to 100-horse power, for pumping and drawing coals.—Address, giving full particulars to "R. T." Post-office, Durham.

**WANTED.—A CIVIL ENGINEER,** practically acquainted with the manufacture of iron, mineral surveying, drawing, mapping, &c., and who has had considerable experience in general engineering and machinery, is open to an ENGAGEMENT as MANAGER of IRON or OTHER WORKS, or of a MINERAL PROPERTY.—Address, "G. H.," 124, Charterhouse-square, London.

**WANTED.—An ENGINEER,** of proved competency, and otherwise entitled to full confidence, possessing also some knowledge of German, to LAY DOWN, and eventually to SUPERINTEND, a RAILWAY in GERMANY.—Particulars and terms to be addressed to Mr. NIGRAM, 27, Gresham-street, City.

**WANTED, a STEADY, ACTIVE, INTELLIGENT, RESPECTABLE MAN,** well skilled in mining operations, to SUPERINTEND the OPENING of a COLLIERY for the owners, in the neighbourhood of Wigan. It is necessary that the applicant should also possess a knowledge of artificers' work in general, as he will be required to make plans and estimates, and to superintend the erection and repairs of buildings. Testimonials as to character and ability required.—Application, stating terms, to be made to N. ECKERSLEY, Esq., Wigan.

**TO MINING QUARRYING, AND OTHER COMPANIES.**  
WANTED, a SITUATION as LOCAL or GENERAL MANAGER.—For particulars, &c., address, by letter, "R. P.," Brown and Standfast, newspaper agents, 4, Little George-street, Westminster Abbey.

**TO HOLDERS OF RAILWAY OR MINING SHARES AND DEBENTURES.**—LOANS ON ENGLISH or FOREIGN RAILWAY, MINING SHARES, and DEBENTURES, for any period, from six months to five years, at 5 per cent. per annum.—Apply to Mr. CHARLES MARTELL, solicitor, 28, Chancery-lane.

**MR. LELAND, 4, CUSHION COURT, OLD BROAD STREET, LONDON.**—BUSINESS TRANSACTIONS in every description of BRITISH STOCKS, FUNDS, and SECURITIES; also, BRITISH and FOREIGN MINES.

**GREAT HEWAS UNITED MINES.—MR. LELAND, 4, CUSHION COURT, OLD BROAD STREET, LONDON,** is a BUYER of the above SHARES. State number and price.

**FOR SALE.—A GOOD SLATE LEASE,** of 100 years, at a rental of £10 per annum.—For particulars, apply to Mr. LELAND, 4, Cushion-court, Old Broad-street, London.

**BOTALLACK.—MR. FOULKES** has a (200th) SHARE TO DISPOSE OF in this TIN and COPPER MINE. Amount of dividend in 1854, £11.10s. Apply at 58, Old Broad-street.

**TRANNACK CONSOLS MINE, NEAR HELSTON.—WANTED TO PURCHASE,** from FIFTY to ONE HUNDRED SHARES; all calls paid.—Address, stating lowest price, "R. P. F.," 23, Great Wild-street, Lincoln's Inn-fields, London.

**ONE HUNDRED SHARES in the WRYGAN SLATE COMPANY** TO BE DISPOSED OF, a bargain, the cash being wanted.—Apply to Mr. SIBLEY, 3, Old Broad-street, City.

**WANTED.—ANY PART OF TWO HUNDRED WHEAL ZION.**—Apply, naming lowest price, "H. D.," Post-office, Bath.

**WHEAL ARTHUR TO THE SHAREHOLDERS.**  
GENTLEMEN.—Circumstances having arisen which will render it necessary to appoint a successor to the gentleman who has for some time past been the office of secretary to your company, I take the liberty of introducing myself as a candidate for the appointment.

I am not only induced to seek your confidence from the reasonable desire of adding to my business position, but from the very kind promises of support which I have already received at the hands of long-standing shareholders, I feel justified in using my best endeavours to gain further patronage.  
It will be remembered by nearly the whole body of shareholders that I was formerly secretary to Wheal Arthur, the agency in London having been placed in my hands, at a period when the mine was by no means in a flourishing state, especially as regards its financial position. My best exertions were then used in promoting the interests of the company, and I was generally complimented by the shareholders for the manner in which my duties were performed.

The removal of the office to Mr. Peter Stainby's, of Salvador House, having taken place without any reflection on either my character or abilities (as shown in the hand some resolution then adopted by the shareholders), but merely with a view to benefit the mine in some way that has not been realized, I feel that I have now a strong claim on your support.

This will be the more apparent upon re-consideration of the circumstances under which a resolution for the removal of the agency to Mr. Stainby was carried. At one of the largest meetings that have ever taken place, I had nearly the unanimous support of those present. The premises which were handed in by Mr. Stainby's representatives gave a majority of votes upon shares, against which my friends were reluctantly compelled to yield.

I had, however, the great pleasure afterwards to learn from some shareholders, whose proxies were then used for this purpose, that had they been aware of the intended removal, their votes would instead have been placed at the disposal of those gentlemen who so strongly supported me. And, further, the knowledge which I afterwards gained, that a proxy of a large number of shares which had been given for a former meeting was then made available, without the knowledge of the shareholders, gave me hope now that my second application will be successful.

Under these circumstances, I most respectfully submit the independent action of each shareholder, and that in so important a step as the appointment of a secretary, who will be faithful in the discharge of his trust, the general opinion of an individual majority should be taken, in preference to the adoption of a resolution on a majority of shares held in few hands. Upon such a ground I believe a just selection of your secretary would be made. I have the honour to remain, yours, faithfully,  
20, St. Helen's-place, London, Feb. 16, HENRY PEET.

**MINERS ASSURED AGAINST DEATH OR ACCIDENT**  
**ARK INDISPUTABLE MUTUAL LIFE ASSURANCE SOCIETY.**  
ESTABLISHED A.D. 1852.  
The Hon. FRANCIS HENRY FITZGERARD, M.P., Victoria-square, Finsbury.  
JOHN ADLER, Esq., M.P., Old Bailey, Finsbury.  
SAMUEL CARTWRIGHT, Esq., F.R.S., Old Burlington-street.  
ROBERT KEATING, Esq., M.P., Chancery-lane, Finsbury.  
JOSEPH J. W. WATSON, Esq., F.R.S., Upper Brook-street, Grosvenor-square.  
The Society ASSURES against ACCIDENTAL DEATH, LOSS OF LIMBS, HEALTH, or SIGHT.  
SAVINGS BANK combined with LIFE ASSURANCE, whereby depositors of small sums may provide policies of assurance upon their lives, free from further liability to premiums, and still be entitled to receive back the amount deposited, with interest, in the event of their requiring to use the money otherwise.  
Every description of LIFE ASSURANCE, ENDOWMENTS, ANNUITIES, &c., TRANSACTED upon the most equitable terms.  
Policies and resident agents of mines throughout the United Kingdom are invited to communicate with the secretary, by whom full particulars will be forwarded on application.  
ONLY OFFICE.—158, LEADENHALL STREET, LONDON.  
AGENTS WANTED IN THE MINING DISTRICTS.







money to the great exertions of the present committee. When they entered upon their duties there were obstacles that appeared almost insurmountable; and yet, by their good judgment, they had got over them, and the mine and various works were in an excellent condition. He had every confidence both in the committee and captain, and should the committee ask to-day for further assistance, he, for one, would willingly respond to it.

The CHAIRMAN produced a stone of ore, and observed that, according to appearance, any one would consider it contained from 10 to 15 per cent. of copper, but when dressed it only produced 3 per cent.; there was some extraordinary mystery about it. They had sent away two cargoes of similar ore to that now on the table, which only yielded 31. per ton. It had been submitted to various practical men, and from its great weight, the only cause assigned was, that it contained a large quantity of iron pyrites.

A SHAREHOLDER enquired whether the price obtained for it covered the expenses? Capt. COLLIVER replied it did.

Mr. LUTWICH: You say you have 2000 tons at surface; will the whole of that pay the expenses?

Capt. COLLIVER: Yes, and give a good profit. The expenses will be very trifling, as it is only to run it down from the mountain by the tram-road.

The CHAIRMAN said he would now submit to them the accounts. The following statement was then read—from the 1st August to the 30th December, 1854:—

Balance	25 0 4
Cash received for the produce of the mine	200 0 0
Cash advanced by bankers, and committee on ore, &c.	955 10 4
Office expenses, &c.	86 11 3
Mine tools, mercantile bills, &c.	1680 10 0
Bath and Co., over-remittance	9 18 6
Balance in favour of mine	£ 3 16 11

The CHAIRMAN said they had to receive the produce of two cargoes of ore; and, as an instance of the bad weather they had experienced, a third cargo, shipped the beginning of November, the vessel was still lying in the Beaumaris Roads; however, the bankers had every confidence in them, and advanced what money they required. The total amount of liabilities was 1680*l.* 10*s.* 4*d.*; the amount which appeared large, but he did not feel the slightest apprehension upon the matter, as every expense had been gone to, and the mine was in a good working condition. They must apply to the shareholders to-day for a small amount; at the same time, he was glad to inform them that the three cargoes of ore would reduce the liabilities to 1400*l.*, and the engineers had agreed to take two bills, falling due in May and July, by which time they hoped to receive a large amount by the sale of ore. He would conclude by moving that the reports and accounts be received and adopted.

Mr. BRAITHWAITE seconded the resolution, which was carried unanimously.

The CHAIRMAN said the next question was, with regard to their liabilities. Taking into consideration their excellent prospects, the committee were still willing to bear a large proportion of them, and had determined on proposing to make a call of 2*s.* 6*d.* per share, which, if all paid up, would produce about 8000*l.*, and, from what they could see, hoped it would be the last time they would have occasion to call upon them. They intended to curtail any extension of the works, and hoped now to close the capital account, and upon the next occasion to think of declaring a dividend. As a proof of the progress they had made, he would observe that in 1852 the ore sold amounted to 1500*l.*, in 1853 to 3000*l.*, and in 1854 to 1600*l.*. All their improvements were completed, and they looked forward next year to brighter days. Sir Richard Bulkeley, their landlord, and also his agent, had recently visited the mines, and both expressed themselves much pleased with the appearance of the works. He would remind them that in making a call, no one suffered more than the directors, as they were very large holders; and he (the chairman) had never sold a single share, but since the last meeting had sold his interest, and the confidence he had in the mine, as he would be one of the first to hold up his hand for winding-up, if he did not think they had a good prospect of getting their money back.

Mr. BRAITHWAITE wished to know what time would be given for payment of the call?—The CHAIRMAN said the proposed call was 2*s.* 6*d.* per share; 1*s.* 6*d.* payable in a fortnight, and 1*s.* in one month from the present time.

Mr. BRAITHWAITE moved that a call of 2*s.* 6*d.* per share be now made; 1*s.* 6*d.* payable on the 3d day of March, and 1*s.* on the 17th of the same month.

Mr. LUTWICH seconded the resolution, which was carried unanimously.

The CHAIRMAN said the liabilities at the present time were 1600*l.*, and in asking them for only 800*l.*, showed the confidence the directors had in the undertaking. He considered they had all the machinery in good working order, and, by judicious management, hoped they would be in a position by next meeting to show something like an appearance of dividends. The accounts were well kept, and the books and documents were open to the inspection of the shareholders, whenever they thought proper to call at the office for that purpose.

Mr. MARTIN wished to know the value of the Lake lode?

Mr. DUNFORD said, for some of the ore they had received 4*l.* 10*s.* per ton.

A SHAREHOLDER wished to know the average charge per ton for obtaining the ore.

The CHAIRMAN replied, 2*l.* 15*s.*, which included every expense.

Mr. DUNFORD said, it used to cost 3*l.*, but the recent improvements had reduced that amount 5*s.*

A SHAREHOLDER said, they had heard much of the bad weather, and detention of the vessels; he wished, therefore, to know whether the cargoes were insured?

Mr. CURTIS (the secretary) stated that they had a floating policy for 5000*l.*, by which all the ore was insured at the rate of 3*s.* per ton, and that policy was fully paid up, and had a considerable time to run.

The CHAIRMAN said, the next question was the election of the committee of management. If it met the wishes of the shareholders, the present parties were willing to remain in office.

Mr. BRAITHWAITE said, after what they had heard, he was sure they would be unanimously re-elected. He would, therefore, propose a resolution to that effect.

Mr. LUTWICH seconded it.—Carried unanimously.

The CHAIRMAN, on behalf of his brother-committeemen and himself, thanked them for the renewed expression of confidence. The shareholders might rely that their best exertions would be devoted to their interest, as, in doing so, they were consulting their own. He could only repeat that they deserved success; but if they could not get it, he could not help it.

Mr. LUTWICH said, he was a large shareholder, and had great pleasure in according his sense of the general opinion of their conduct on behalf of the shareholders; and the least they could do was to propose a vote of thanks to them.

Mr. ATKINSON seconded the resolution, which was carried amidst much applause.

The CHAIRMAN said, he was much obliged to them for the compliment, and they might rely on the continued exertions of the committee on their behalf.

Mr. SHARLAND said, the next business was the election of auditors, and he had much pleasure in proposing the re-election of Messrs. Atkinson and Birkenhead, whom, he believed, had always given the greatest satisfaction to the shareholders.

The CHAIRMAN, in seconding the resolution, said he would couple with it a vote of thanks to them. He could assure the shareholders that one had the eye of a hawk and the other of an eagle, but they had nothing to conceal from them.

Mr. ATKINSON, in returning thanks, said the straightforward way the accounts had been presented to them by Mr. Curtis made their duties comparatively light. Every item was vouched, and if any explanation was required, the fullest information was given in the most courteous manner by Mr. Curtis; he would, therefore, conclude by proposing a vote of thanks to that gentleman.

Mr. BRAITHWAITE seconded the resolution, which was unanimously carried.

Mr. CURTIS, in returning thanks, said he was much obliged for the kind expression on his behalf; he would continue to perform the duties to the utmost of his ability, and it would be gratifying to him at all times to find they were appreciated.

The proceedings then terminated.

### TAMAR SILVER-LEAD MINING COMPANY.

An adjourned meeting of shareholders was held at the London Tavern, Bishopsgate, on Tuesday.

Mr. G. B. CARR in the chair.

The CHAIRMAN, after apologising for detaining them, said he was happy to communicate that two of the most active members of the committee of investigation, and to whom they were much indebted for the proceedings taken by them on behalf of the shareholders, had been elected members of the board. He was also glad to inform them that they intended in future to take such steps that the directors should be elected by the shareholders, thus keeping a proper feeling between those who governed and their constituency. According to the present constitution of the company, all the board could not resign until others were appointed, but they were willing to do so immediately they elected others to fill their places.

Mr. HADWORTH said, he ought to apologise as having been the cause of detaining them, but Mr. Carr and himself had been usefully engaged in managing the affairs of the mine, in which many present were interested, and which had been under the same management as the Tamar Mine. With regard to the Tamar Mine, he was happy to inform the shareholders that the exertions of the committee had been attended with complete success, and that their entire property had been secured. There had been a considerable deficiency, but it had been satisfactorily adjusted, and they now hoped to start fresh, and upon altogether a different system. His friend, Mr. Dunsford, had taken considerable pains in going through the accounts, and he should leave it to him to give a statement of their financial position. Mr. Carr had stated that Mr. Dunsford and himself had been elected directors, but they only held their office during the pleasure of the shareholders, as they had always contended that the shareholders ought to have a voice in the choice of those who had the management of their affairs. (Cheers.) The next question to be considered was the state of the mine, and its management in future. It must be for the board to consider these matters, and bring them before their notice another time. Hitherto they had not had time to suggest any alterations, but trusted to be able at no distant day to propose arrangements that would be satisfactory, and meet the requirements of the case.

Mr. DUNFORD said he had examined the accounts to December, and found that the assets over the liabilities of the mine were 2510*l.* 8*s.* 8*d.* He was not "imagining" the reserve fund, but telling them the actual amount of available assets, after all costs had been paid to that date.

A SHAREHOLDER: Are merchants' bills and every liability included?

Mr. DUNFORD: Yes, every account is included as I believe, and I have taken great pains to ascertain it, amidst the confusion prevailing at present at Salvador House. I will read you the detailed account, if you like; but I fancy the statement I have just made will be all you desire to-day.

The CHAIRMAN said, they were aware Mr. Hadow and Mr. Dunsford had been elected directors, but they only held office until their election was approved by the shareholders. It was now the time to say whether they approved of that election. (The shareholders having held up their hands, amidst much applause, the chairman continued.) He had much pleasure in saying that the election was unanimously approved by the shareholders. He was authorised by Mr. Bettley and Dr. Spurgin to tender their resignation as directors, and at the same time he tendered his own; he must admit that he (Mr. Carr) had committed an error in having confided too much in an individual whom it was unnecessary to name—indeed, they all placed too much confidence in him. But, before they resigned, they must appoint another director; as, according to the constitution of the company, the board is not to consist of less than three.

Mr. BRAITHWAITE said he had the names of three gentlemen to propose—Mr. Carr, Mr. Burris, and Mr. Cookney; two of those gentlemen, Mr. Carr and Mr. Burris, were well known to them. He need not say that Mr. Carr had acted most nobly on their behalf, and he was satisfied it was the unanimous wish of the shareholders that he should continue on the board. (Hear and cheers.) Mr. Burris had also been indebted to one of the committee of investigation.

Mr. HADWORTH reminded the meeting that, according to the existing rules, new directors could only be elected by directors, therefore the motion must be put as a recommendation.

A SHAREHOLDER wished to know if there was any other gentleman on the committee of investigation who had taken an active part, as they were the proper parties to be elected directors? He had not heard much of Mr. Cookney.

Mr. BELLENGER assured them that Mr. Cookney was a very large shareholder, and had most materially assisted the committee.

Mr. BOYLE had great pleasure in seconding the nomination. It was out of his power to express his thanks to those gentlemen for the trouble they had taken in unravelling the mystery in which their affairs had become involved. He was quite inadequate to the task of adopting language sufficient to express his gratitude to them. (Hear.)

No doubt those gentlemen who had devoted so much time for the benefit of their fellow shareholders ought to be selected for directors, and to show their confidence, he trusted full authority would be vested in them for conducting the business, without interference, and that they would be allowed to arrange everything according to their discretion. There was only one matter to which he would call the attention of the board; they would recollect that at a meeting at Salvador House, when the directors were requested by a large body of shareholders to resign, the only parties who held up their hands against it were the captain and another, whom it was unnecessary to name; he thought the captain ought to be censured, and his services dispensed with. (Hear.) It was unseemly conduct, and deserving reprehension, that a man who was receiving their money should oppose enquiry into the management of their affairs. It was monstrous that such a man should forward and hold up his hand in opposition to the great body of shareholders—his employers. (Hear.) He (Mr. Boyle) was delighted that the gentleman in the chair was again elected a director. Men of his stamp would do much to relieve mining of the odium that had been cast upon it by such conduct as had been pursued in the management of this company. It was wonderful to him how men could have acted in the way the late directors had, in refusing to resign, having, in fact, possession of the property, and saying the shareholders should have no control over it. (Hear.) In this state of things Mr. Carr came to their assistance, and he was sure they would all join in tendering their best thanks to that gentleman. (Cheers.) Out of evil sometimes comes good, and he thought their proceedings would be of great benefit to the mining interest generally, as it would open the eyes of others, and cause them to look after their property. He had great satisfaction in concluding by seconding the recommendation.

Mr. BERRY having made some observations respecting the remuneration to the directors, the proceedings were adjourned for a short time, for the formal election of the additional directors by the existing board. Upon resuming,

The CHAIRMAN begged to state that Messrs. Cookney and Burris had been duly elected directors, and that he (Mr. Carr) had consented at present to hold his seat (cheers), although he would be glad to be relieved from his position.

Mr. HADWORTH begged to return thanks for himself and his colleagues, whom they had elected, and were now directors. There were many matters that would come before them. The rules required revision, and it had to be considered whether it should be continued as a scrip company; these were grave questions. Another important point was, that the directors should not be self-elected. These and other matters would be deliberated upon, and the shareholders would be called together again as early as possible. They proposed, instead of having one meeting yearly, that they should hold quarterly meetings, and have the accounts made up at those meetings. (Cheers.) The shareholders would also be presented with a report of the state and condition of the mine. If, from frequent meetings, they had little to report, they could not help it, but he (Mr. Hadow) had always been of opinion that anything the directors knew ought to be known by the shareholders. (Cheers.) Some observations had been made respecting the 200*l.* dividend amongst the five directors. He thought his character was sufficiently known, and it would rest with the shareholders whether they were to devote their time, valuable as it was, for nothing. (Hear.) If the shareholders asked him to do it, he would do the best he could for them, but he did not think they ought to do the work gratuitously. He stated it openly, and after they had made the revisions they would leave the question of remuneration to the shareholders; he hoped, therefore, no decision would be come to on this point until the next occasion.

Do not let them enter into matters prematurely; they wanted to make a new start (cheers). Before he went down, although it might appear against him, he could not help objecting to the fact that thanks were due to the committee, who had taken great pains and trouble in extricating the affairs of the company, and it was his pleasing duty to say they had done so. They had elected three of the members of the committee of investigation on the board, but he begged to call attention to the other two—Mr. Mackay and Mr. Belenger. They had not been named, but without their assistance they would have done very little. In fact, they had worked together harmoniously and successfully, and they hoped on some future occasion to see those gentlemen as directors.

Mr. BERRY said, as the directors proposed to take the matter into consideration, he was perfectly satisfied, he had not done anything from personal motives.

Mr. HADWORTH: But your observations would make it appear that we came here to take places for the sake of the money.

Mr. DUNFORD said, as it was proposed to call them together immediately they had prepared a new code of laws: he thought the meeting would confide in the board for the present, and that any discussion about remuneration was in bad taste and premature. As, however, it had been mooted, he, for one, would tell them candidly he would never act gratuitously. He had known many companies where directors were unpaid; and at the board meetings one only would be in attendance, and the clerks were running about town for hours to get cheques signed, or to solicit a director to attend. He never found unpaid services very valuable. Mr. Boyle had alluded to the captain of the mine; the captain's conduct had not escaped their notice, but hitherto they had been flying at higher game, and therefore did not mention him. The character of the management in London had exercised its baneful influence on that at the mine, and he believed that a more viciously conducted mine than the Tamar was not in existence. (Hear.) The directors were determined to reform it altogether, and, if possible, to cleanse such an Augean stable. (Loud cheers.)

The CHAIRMAN said, upon looking at the scrip, it appeared that 4*l.* 10*s.* per share was paid, upon which 4*l.* 10*s.* had been received as dividends; and, therefore, hoped they still had a good mine.

Mr. BELLENGER: The south mine has paid a loss of 30,000*l.* upon the other mines; and I have little doubt, if properly worked, that it will turn out very valuable.

Mr. BERRY: And, in addition, has paid 14,000*l.* to the Smelting Company.

Mr. BELLENGER said it was his pleasing duty to propose a vote of thanks to the chairman. All who had observed his conduct throughout this complicated and difficult business, must be very proud of having such a chairman. They were deeply indebted to him for the success which had attended the exertions of the committee of investigation; and he (Mr. Belenger) asked them now to join heart and hand in giving full expression to their feelings for his upright and manly conduct towards them in the chair.

Mr. BERRY, in seconding the resolution, said the labours of the whole of the committee had been pretty extensive since October last, but the most urgent had been those of the last few days; and, in remarking upon the successful issue, it was only common justice to state, that for that result they were mainly indebted to Mr. Carr and Mr. Hadow. One of the great faults in the management of the mine had been that they did not pay as they went on. Let them do every honour to those two gentlemen who had sacrificed their personal comforts for the shareholders.

The resolution was then unanimously carried, amidst much applause.

The CHAIRMAN, in acknowledging the compliment, said he was exceedingly obliged to them for their kind expression of confidence in him, and it was nothing but that feeling of confidence that would have induced him to remain a director. They might rely upon his best exertions to bring about a successful issue. (Cheers.)

Mr. BETTLEY was present throughout the proceedings, but took no part in them.

### TAMAR MARIA MINING COMPANY.

A general meeting of shareholders was held at the office, Royal Exchange-buildings, on Thursday.—Mr. SAMUEL WEATHERLEY in the chair.

The SECRETARY read the notice convening the meeting, and the minutes of the last, which were confirmed. The following report of the committee of management was next read:—

The committee have but little to report as to progress since the last meeting, except that on the appointment of Captain Hodge, and the unproductive nature of the mine, interested early in Nov. A dispute arose as to the drilling of the ground, by Mr. Jonathan Davey, in July, 1854, when a plan and section of the mine was made. It was resolved to re-dial the ground, and on the 30th December, it was proved that sufficient allowance had not been made for the dip of the lode, and that consequently considerably more ground would have to be driven through. The report of the 1st of January was as follows:—

Tamar Maria.—This mine has been re-dialled by Mr. Jonathan Davey, owing to the appearance of the lode in the cross-cut adit, and the level extended thereupon, and it is now proved that the branch out on the 11th of Nov. is not, as was supposed, the No. 4 lode at all, but simply a flyer thrown off from the main lode, broken up, doubtless, from its proximity with the cross-cut. This has been ascertained by using up the adit, and a deep shaft of 5 fms. and from the dip of the lode therein, as re-dialled by Mr. Davey, it is now calculated that the adit cross-cut must be driven 6 fms. further before it is intersected. The lode in the shaft is 4 ft. wide, well-defined, with two good walls, and has altogether a most promising appearance.

The agent now reports, under yesterday's date, that the level has been extended 6 fms. since the mine was re-dialled; that the ground has changed in the end for the better; that more water is issuing therefrom; and that, in fact, every indication justifies the hope of a good result in the course of a few days. Under these circumstances, the committee recommend that the meeting should be adjourned for about a month, to consider the prospects of the mine after the lode is intersected; and that a special general meeting be then held, to consider the propriety of cancelling the unpaid shares, which, if carried out, will reduce the shares in which the mine is divided from 7500 to 8500.

The subjoined statement of accounts from April, 1853 (the commencement of the company), to February, 1855, were submitted:—

Original deposit on 745 shares, at 10 <i>s.</i> each	£372 10 0
Conversion of capital by call	662 2 6
Mine costs and merchants' bills for 22 months	787 0 10
Rent, management, &c., for same period	128 2 6
Balance in favour of mine	£119 9 2

The report and accounts were received and adopted, and the following resolutions unanimously passed:—That referring to the resolution passed at the last general meeting, prohibiting the committee from issuing any more unclaimed shares, this meeting do adjourn until Monday, the 12th day of March; and that the committee be requested to convene a special general meeting, to be held at the close of such adjourned meeting, to consider the propriety, and to determine upon absolutely cancelling all unissued shares. "That it is expedient the present scrip shares be called in for registration, in accordance with clause 10 of the rules and regulations of the company; and that this meeting do order the committee to take the necessary steps for calling in such shares accordingly." The proceedings were then adjourned until the 12th day of March next.

IRON MANUFACTURE IN SCOTLAND.—So recent as the year 1830, there were only 16 blast-furnaces around Glasgow, each producing an average of 3000 tons of pig-iron per annum, or a total of 48,000 tons; whereas, during the year 1854, there were 116 furnaces in blast, the vast majority of which are connected with the City, each producing an average of 5300 tons, or a total of 754,000 tons. Taking the average price during the last year as at 7*s.* 8*d.*, the gross value of the industry amounted to 3,000,000*l.* With respect to the manufacture of malleable iron in Scotland, that is even more recent; for although it was not really till 1839 that it may be said to have been carried on in Scotland to any great extent, while no note of the quantity made appears to have been kept till 1845, when the production was estimated at 34,000 tons. During the past year the manufacture of malleable iron reached 110,000 tons, being over 10,000 tons less than the preceding year. The present annual value of this manufacture is 1,110,000*l.*

The GLENFIELD PATENT STARCH, used in Her Majesty's laundry, is sold by all grocers and oilmen; by Robert Wetheropson and Co., 46, Dunlop-street, Glasgow; and Wetheropson, Mackay, and Co., 66 Queen-street, Chesapeake, London.

### THE EAST INDIAN IRON COMPANY.

The second annual general meeting of proprietors was held at the offices of the company, New Broad-street, yesterday.

Mr. B. W. CRAWFORD in the chair.

After the usual preliminaries, the SECRETARY (Mr. G. E. Cooper) read the following report of the directors:—

Your directors have to report that, in pursuance of the resolution communicated in their circular letter to the shareholders of the 1st September last, they proceeded to complete the purchase of the properties, works, and leases, of the Indian Iron and Steel Company, on the terms of agreement between the two companies and of the valuation, taking up the manufacture as from the 1st March last, the date of the inventory for the valuation. The amount found payable to the old company was, as stated in the committee's report, accompanying the above circular, 36,000*l.*; but of this sum about 8000*l.* is estimated to represent value of ores, fuel, castings, and other stock, reducing the actual amount paid for the buildings, plant, and machinery, to 28,000*l.*—terms which your directors could not but consider favourable.

Immediately on assuming charge, your directors dispatched full instructions to Mr. Beaumont, and placed at his disposal the necessary means for the vigorous execution of the undertaking. The time which has elapsed since his receipt of these in India has been too short to admit of any considerable results arising, but so far as they have gone, they are of an encouraging and satisfactory character; and your directors have every reason to be pleased with the zeal, intelligence, and judgment manifested in Mr. Beaumont's proceedings. He has been actively proceeding in extending the arrangements for the supply of fuel and labour, and with the improvements and additions to the Beyore works, in which he was engaged under the former company. In the course of these he has succeeded in introducing important improvements in the construction of the puddling and re-heating furnaces, by which the manufacture of pig into bar-iron is carried on far more economically and effectively than before. During this time also the blast-furnace, which was blown in at Beyore in August last, has been working steadily and well, and producing metal of uniformly excellent quality. The ores on the Malabar Coast have thus been proved to be as tractable in the blast-furnace as those of Salem, which have so long been successfully smelted at Porto Novo. According to the last accounts from the Porto Novo works, the blast-furnace had been blown out for the purpose of repairing the engine, but it was expected to be again in blast within a few days.

Orders of various descriptions have been executed, and are in hand at both works, and several consignments of pig-iron have been made to this country, part of which has lately been received and sold.

From this side part of the additional machinery required by Mr. Beaumont has been dispatched to him, and steps have been taken for supplying the remainder without delay. By the terms of the Deed of Settlement, three of the directors—viz., Messrs. R. W. Crawford, G. P. Barclay, and C. D. Bruce, together with one of the auditors—Mr. Alexander Beattie—retire from office at this meeting, but being eligible are proposed for re-election.

Appended is a statement of accounts. With regard to the Indian portion, time has not permitted their being rendered in the detailed form which your directors have required, and in which they will in future be supplied.

Statement, showing receipts and payments of the company from the commencement—in India, to 30th September, and in England to 31st December, 1854:—

RECEIPTS.

HOME.—Depositors on shares	£1,304 5 0
Calls	64,023 10 0
Interest on overdue calls and investments, and transfer fees	£65,327 15 0
INDIA.—Depositors on shares	£ 29 0 0
Calls	2319 0 0
Sundries for stamps on powers of attorney	3 0 0
Agents for account of works	7324 14 9
Sales and sundries	509 5 6
Total	£75,710 18 0

PAYMENTS.

HOME.—Preliminary expenses	£1658 12 10
Furniture and fittings of office	160 8 1
Advertising, stationery and printing, postage, carriages and travelling expenses, salaries and allowances for services, household and miscellaneous expenses, and law expenses, rent, taxes, and insurance	815 15 6
Services of agents and passage of officers	157 0 6
Bills drawn by agents	4580 16 0
Stores, machinery, &c.	3463 4 6
INDIA.—Miscellaneous stores	321 1 10
Ore, charcoal, billets, limestone, clay, bricks, &c.	3503 17 10
Timber and buildings	420 17 5
Wages and establishment charges, including general management, travelling expenses, office expenses, and incidentals	2821 5 7
Rent and royalty	291 17 7
Amount in hand in India, Sept. 30, and in England, Dec. 31, 1854	7,350 0 3
Amount with bankers—Cash	8,086 5 11
Loan at interest	12,000 0 0
In names of trustees for payment for valuation of plant, &c., on execution of conveyance by old company	30,000 0 0
In hand with petty cashier	3 14 5
With agents in India on share account	2,351 0 0
At works, with cashiers	475 0 0
Total	£75,710 18 0

BALANCE-SHEET.

Dr.—Depositors for class A, or preference shares	£1,333 5 0
Calls paid on ditto	66,842 10 0
Amount paid on B, or deferred shares	200,000 0 0
Interest on overdue calls and investments, transfer fees, stamps	600 18 3
Agents for advances, sales, &c., as per receipts and payments	7,834 0 3
Sundry creditors—Old company, for valuation of plant, &c.	36,000 0 0
Acceptances on drafts from India	3,706 5 0
Sundries	78 12 9
Total	£315,895 11 3

Cr.—Value of exclusive privileges, Charter of Incorporation, forest, mineral, and other property, belonging to the old company

Plant, machinery, stock, belonging to ditto	£300,000 0 0
Payments—Home, as per statement of receipts and payments	3,634 14 5
India, as per ditto, ditto	15,560 1 3
Sundry amounts outstanding (waiting advice for adjustment)	4,184 13 3
Amount on hand, as per statement of balances	57,516 0 4
Total	£315,895 11 3

The report and accounts were received and adopted, the directors re-elected, and the proceedings terminated with a vote of thanks to the chairman.

### IRISH PEAT COMPANY.

The adjourned annual meeting of shareholders was held at the offices of the company, 10, Old Jewry Chambers, on Wednesday.

Mr. WOOD in the chair.

Mr. JERSON (the secretary) having read the notice convening the meeting—

The CHAIRMAN stated, that before entering upon the business of the meeting he should wish to make a few remarks. He considered that the directors had exercised sound discretion in not demanding money from the public without the advice of







created, although we may have a clear notion of its component parts, that there is a very wide field of enquiry open, even in this department of the question. The question, Where does the gold come from? is not so easy to answer. I have seen, in reference to lead veins, stones of one kind, without particular attention, being called rubies, or, at least, many of them, which are mostly solid. I have seen them as much as a ton weight. I have frequently found that they are connected to the veins by a leader or trace of red earth, in many places not much thicker than a thread, and bearing evidence of being the conductor of the subtle element that formed the mass, which apparently was isolated. May not gold be formed in this way, as well as in veins? The metallic influence, I believe, is pervading all the earth, from the inside of the crust, or shell, to the outside; and its deposit takes place in every locality that is convenient or suitable to the forces of the laws of nature.

### BRITISH AUSTRALIAN GOLD MINING COMPANY.

Sir,—An advertisement at p. 94 of last week's Journal contains so palpable an exaggeration of the actual works of this company, that I am induced to trouble you with a few facts, which may be relied upon. I consider that the risk of misrepresentation would be avoided if the directors of this company would, from time to time, inform the public and the shareholders of the actual state of things; for, of course, it cannot be supposed for a moment that they do not receive their advice regularly by every mail. A correspondent at the Bendigo diggings communicates to me by the overland mail the following particulars, which I place at your disposal for publication, if you think proper, as they are important, and, no doubt, strictly correct.

He states that the steam-engine and machinery belonging to the British Australian Gold Mining Company had arrived, and had been erected at California Gully, the site of the company's intended operations, and one of the richest gullies at the Bendigo; that extensive preparations were being made by the indefatigable manager of the company, Mr. David Dyer, by the construction of extensive water-works, for the collection of fuel and auriferous washing-stuff, to secure uninterrupted work. Further, that the steam-engine and machinery had been set to work, on the 7th of November, under most favourable circumstances. My correspondent states, that this is the first company practically working with any immediate prospect of success in that district, and predicts a much larger and more rapid return to shareholders than if employing their capital in the reduction of gold quartz.—London, Feb. 15. AUSTRALIAN.

### [ADVERTISEMENT.]

### GOLD MINING IN CALIFORNIA—WATER COMPANY.

Sir,—The application of hydraulic power in plain mining is but a late invention, completely revolutionising the gold business; as one man, with the hydraulic hose, can frequently perform the work of twenty men, the quantity of water required, can be had for distribution will save four-fifths of the mining labour at present required, with permanent employment. The proposed aqueducts are to be constructed on a large scale, requiring a great advance of capital, it is considered essential, therefore, to establish a regular organisation to the subject connected with water companies in California, that the companies may be able to assume the position on Change which the importance of the subject entitles them to: 75 per cent. per annum may be realised on all capital invested in aqueducts, according to the system of operations which has been recommended. F. CADELL, Junr., Mining Agent, Quartzburg, Mariposa County, and Agent for the Quartzburg Water Company, California, Dec. 25.

### TO THE HON. MEMBERS OF THE STOCK EXCHANGE.

GENTLEMEN,—With reference to my previous communications, I beg to state that it appears of essential importance to press with all possible dispatch an enquiry into the subject connected with the proposed Water Companies in California, for the large sale of operations, a movement which, I am glad to inform you, has met with the decided approval of the majority of influential capitalists in London, &c., as the distribution of the various rivers throughout the mining regions is the only comprehensive field connected with the gold business in California for the investment of English and European capital, towards procuring the requisite production of gold to supply the demand which must always of necessity exist, in consequence of the progressive increase of the commerce of all countries. I request, therefore, that you will lay aside that indifference, which is common to all business men when a new subject is introduced, and commence energetic negotiations at once, without a moment's delay, by transmitting any questions you may think proper to give effect to the object in view, addressed to the Agent for the Hydraulic Power Enquiry, Quartzburg, Mariposa County, California, which is represented, *pro tem.*, by the writer hereof, satisfactory answers will be forwarded in due course, supported with the requisite practical proofs to establish the facts beyond doubt.

The application of hydraulic power as a substitute for at least four-fifths of the manual labour required in plain mining, is the basis on which we found the demand for the co-operation of English capitalists to complete the organization of the enquiry referred to; it is, therefore, essential for your honourable body to take notice of the subject at your very earliest convenience.

Members of the "Enquiry" will be put in possession of material information connected with gold mining speculation, with the view of checking the organization of fictitious schemes.—P. CADELL, Junr.: Quartzburg, Mariposa Co., California, Dec. 25.

### [ADVERTISEMENT.]

### CWM EIGIA QUARRY SLATE AND SLAB COMPANY.

Sir,—As the report of the meeting of this company, in your last Journal, is incorrect upon facts, I have to request that you will, in fairness, insert in your next publication the enclosed corrections.

THOMAS LEE, Chairman of the Meeting.

In the report of this company's meeting, in the Journal of the 10th inst., it is asserted "that the transaction with Mr. Semple was a perfectly legitimate commercial contract, &c.; but no proof of anything of the sort was adduced at the meeting. On the contrary, its legality was impeached by the chairman, upon the opinion of an independent solicitor. It is stated "that the obstinate conduct of the chairman, and the explanations which ensued, did not tell very credibly for his personal motives." As the chairman's explanations are pretty well embodied in his communications to his colleagues of the 23d March, the 27th Oct., and the 13th Dec. last (the documents referred to at the meeting), he encloses copies, and requests you to publish them, and leave the proprietors to judge of his motives for themselves. The statement that the chairman "made a false statement at the meeting," is incorrect. When he saw the compositors of the company and their personal friends, who, in reality, formed the very small body assembled (about half a dozen), were endeavouring to stifle all enquiry, he formally dissolved the meeting, and left the chair; and he feels it his duty to state this fact, that what might occur afterwards should not be made binding on those shareholders who were present.

### TO C. J. PAYNE, ESQ., ROYAL EXCHANGE-BUILDINGS.

DEAR SIR,—Yesterday the arrogance of Mr. Leonard reached its culminating point with me, by which I was induced to consult a friend of mine, well conversant with the construction and working of public companies, and I find that to go on any further, without consulting the shareholders, might be the means of bringing some degree of moral responsibility upon myself; therefore, I shall feel under no reserve upon the point, but, at the same time, I shall prefer its coming from the board, as a body, rather than from myself individually. The points I am anxious to consult them upon are the free shares, and the re-construction of the board. The former, I am assured, as I have always thought myself, have been obtained by Mr. Semple by misrepresentation; and as to the latter, the board ought to have a fair share of independent shareholders, and not to be swamped, as it now is, by free shareholders, or the nominees of a single member of the board; for, in fact, we are all the nominees of Mr. Leonard, and find, to my surprise, the difficulty of carrying any measure that does not originate with him. In fact, he is not only trying to play the autocrat, but he gratuitously offends his shareholders by his conduct. On the one hand, he is intolerant, and must be restrained, for the benefit of all parties concerned, and that, I feel convinced, can only be done by the shareholders themselves; and as we have now arrived at that epoch, when it is suggested to garble the minutes of our proceedings, for the purpose of making them palatable to the shareholders, before entering them in the minute book, which appears to me so near akin to "cooking accounts," that I deem an open appeal to the shareholders no longer to be delayed.

As I have already felt it necessary, as you are aware, to take advice from my private solicitors upon the affairs of the company, I shall retain 25s. in hand for their expense of that kind, to be accounted for hereafter. I enclose you a check for 25s., which two sums will cover the payment of the 300 shares now due.—THOMAS LEE, Esq., George-yard, Lombard-street, Oct. 27, 1854.

Extracts from Report to the Board of Directors, dated the 23d of March, 1854:—"The 'take-note,' originally obtained through the intervention of Mr. Semple, has been cancelled, and another granted for three years, commencing the 4th inst., agreeing at any time during that period to grant a lease for 21 years more, subject to the same royalty as before, but including all other mines and minerals found upon the land, which is now considerably augmented in extent. These terms were positively refused to Mr. Semple by the proprietors' agent, and the additional advantages may unquestionably be considered as having been obtained by the company, but with the implied understanding that vigorous measures will be taken without delay to carry on the works, so that an ample royalty may be realised to the lessee."

I have come to the conclusion that an active and frequent supervision of the works may be kept up by the board, irrespective of what the cost may be; and until that expense can be spread over a considerable amount of business, it will be necessary to have a heavy interest in the incidental charges of the company; but as Mr. Semple is by far the largest shareholder, and has the greatest interest in the being carried out, and for reasons which it is not necessary here to enumerate, I applied to him to make such consideration to the deputation (who, in all probability, would have the benefit of the labour fall upon their shoulders) as would relieve its capital from claims for remuneration for extra services, in the early proceedings, as the acting managers may be considered justly entitled to. This proposition Mr. Semple has verbally assented to; and if it be carried out, the funds of the company will be relieved of a great, unproductive item of expense, and he (Mr. Semple) will still, in my opinion, retain all the interest in the company which he ever equitably entitled to.

### TO JOHN LEONARD, ESQ., LONDON-STREET, READING, BERKSHIRE.

DEAR SIR,—I find that Mr. Semple and Mr. Payne have had an interview with you, and that the former is at last coming down in his pretensions, but in an irregular manner; that he is only willing to give in his resignation to his proposition; and as both you and myself have a position to maintain, I deem it incumbent upon me to express myself on the present state of the Cwm Eigia, without the least reserve. I will be no party to any scheming, for the purpose of sliding matters on to the free shareholders, who may find themselves masters of the paying shareholders, or that you wish any injustice done to those who have worked up and organised the company, or that you individually should come to the mortifying position of a break down in a concern you have so prominently taken such great pains to establish; but consider it incumbent upon you to permit such an outrageous and unbecoming division of free shares to stand open, after it has come to my knowledge how very different Mr. Semple's interest really is to that which is propounded in the prospectus of the company. I think 3000 free shares on the whole is as large a distribution as I can consent to stand allotted to him and his nominees, without first taking the opinion of the shareholders upon it. There must likewise be a re-organization of the board; more than that you must really content yourself with your own individual influence never be tolerated for any length of time. The paying shareholders must be fairly represented at the board, and I consider Mr. Payne quite sufficient to represent the free shareholders. The attorney's position is so unequivocally disclosed by the large number of shares received by him from Mr. Semple, that I consider he is anything but a promoter of the interests of either the shareholders or the board. I need no say further that the attitude he has placed you in, by inducing you to sign a statement that gives the shareholders the power of divesting you of any share in the company, while, as joint lessees, you are under covenants to the original proprietor,

If you consider such an attorney competent to protect the interests of his clients, I have no wish to be one of them; therefore, unless we can at once reduce the free shares to 3000, and have a legal adviser who has the ability to protect us, and whose interests are not adverse to those of the paying shareholders, I think we should at once take the only proper course that appears to me to be left open to us—viz., to meet the shareholders, and let them know how matters stand, before more money is actually raised, and I am no longer past making a call, unless it can be done without actually doing so. I am no longer past making a call, unless it can be done without actually doing so. I am no longer past making a call, unless it can be done without actually doing so.

P.S.—If a meeting of shareholders takes place, the allotment to the board, although involved in some mystery, was, I understand, 1000 shares, and ought to be placed at the disposal of the proprietor.

### WELSH POTASSIUM MINING COMPANY.

Sir,—As the agents for this company in Manchester, we think it right to state, in reply to the query of "A Shareholder" (Manchester), that although the dividend was only due on the 1st of this month, we received the directors' cheque on the 24th of January, and that we paid to all the Manchester shareholders known to us their dividends immediately, and have their receipts.

We may reply to your other correspondent, "Z," that reports from the mines are regularly forwarded to all the large shareholders. If it is desired by any of the proprietors, the accounts can be forwarded to your Journal; but the directors were under the impression that every one interested was acquainted with the progress made. The recent accounts from the managing director (who is at the mines) report that an extension of the great lead (No. 1) has been discovered west, where it was not expected. The reports further, that almost all the surface operations are impeded by the severe frost, "being very much more severe on the mountains than anything we can form here any idea of." DUFFIELD, LOTHKROFT, AND WHITWORTH, Accountants.

### TO THE SHAREHOLDERS OF THE POLTIMORE MINE.

GENTLEMEN,—In the Mining Journal of the 10th inst. is published a letter signed "B. (a Shareholder)," in which the directors in general, and I in particular, are so unceremoniously assailed, that although "B." is ashamed of his name, and requests shareholders to address him, I am glad to inform you, that I cannot but notice his letter as one of that class which, if treated with silence, may be assumed by some persons to be truthful.

"B." begins by protesting that he is "no speculator," but admits that he "purchased many hundred shares, at a high premium," and that he "sold several hundred shares." However, passing over this small instance of self-delusion, I find that "B." pins his faith upon a certain report of Messrs. Hand, Moffat, and Marshall, in order to establish his facts, and urge the shareholders to a crusade against the directors. He is either ignorant of the fact that at a public meeting of shareholders, held only a few weeks ago, this report was agreed by all parties to be buried in oblivion; or if he be not so ignorant, he appears in the light of one who conceals his name until the public occasion of confronting fairly with his opponents is past, and then courts the position of a popular leader, under false pretences, inasmuch as all the matters of complaint quoted in the report of Messrs. Hand, Moffat, and Marshall were disposed of, as sensible men thought best, at the meeting in question. He makes no allusion to an able reply to that report which the directors published before the meeting; and he is, therefore, again self-convicted, either of ignorance of his subject, or of suppression of the truth. I am not so profoundly competent as yet to venture on his historical attack upon me is also added to report of certain mining gentlemen—some of Leeds and some of Marazion—who visited the mines for a few hours, and saw certain unfinished portions of machinery, and certain green masonry, and, very naturally fell into some mistakes, which, had they referred to me, would have been corrected. At the public meeting in question, it was agreed that this report also should be treated *sub silentio*. But lest "B." should have a handle for saying that I shrink the discussion of this report, I hereby challenge him to bring it forward at the next public meeting. If he will give me notice of his intention to do so, I pledge myself to give the meeting full and satisfactory explanations, which, indeed, were publicly offered to the last public meeting, and considered no more.

Lastly, as "B." is so anxious to "dispute with my future services," it may be a consolation to him to know that those "services" hang upon the absolute will of the directors. I am only their "consulting engineer," and am only consulted when the directors please; and after this meeting his points, as I trust frankly, "B." must excuse me if I decline to take any further notice of "a shareholder," who is ashamed of his name; but to you, Gentlemen, brother shareholders, who may wish to know reasons for any of my professional acts, and will enquire openly, I shall always be happy to comply in the name of—Yours, &c., W. S. MOOREHEAD (also "a shareholder"). 11A, Great George-street, Westminster, Feb. 12.

### MINING IN IRELAND—SOUTH CORK AND CARBERY WEST.

Sir,—I much regret that your Dublin correspondent can find no better occupation than to criticise my reports on the South Cork and Carbery West Mines. I must beg, however, to inform that gentleman that the statements which have been made by myself in your Journal, relating to these mines, have been strictly confined to the truth, and although they may not appear quite pleasing to him (as he quite complains of the containing neither bog Latin or tin), I flatter myself, nevertheless, that such defects will be excused by those whom it most concerns, when known they are made with honesty of purpose. My statements have always been made to the best of my judgment, as a miner, and I can assure him they are quite independent of any preconceived notions that may have been formed by others. The "P. S." statements which he adverts to, bearing date the 13th January, and appearing in the Journal of the 20th, I beg to tell him, for his better information, were not from my pen, and I know nothing of them whatever. I am not so profoundly competent as yet to venture on such statements, and shall therefore defer doing so until I can see very much further through unexplored ground than I can at present. As to my reports and figures, as that gentleman is pleased to style them, I consider myself as being accountable to my employers only, and not to the Dublin correspondent, who, it would almost seem, is actuated by too strong a desire to condemn certain things without the aid of either counsel or jury. If the Dublin correspondent has a private pique against any individual connected with either the South Cork or Carbery West Mines, surely it would be much more manly on his part were he to combat such individual personally, and not to pour his railing and satirical remarks upon the uncharitable feelings of innocent parties, who have not the slightest idea as to the meaning of his insinuations. I am quite unacquainted with the said correspondent; I do not know who he is, and am perfectly confident that he can know but as little of myself. I am unconscious of ever giving him any offence, and am quite certain that I have not given the slightest occasion to call forth from him such an illiberal display of unfeeling sarcasm.

South Cork Mines, Feb. 7.

F. TAEWKEER.

### ARE SLATE QUARRIES PROFITABLE?—PENQUEAN QUARRY.

Sir,—I have noticed the remarks in your last Journal, made by Mr. Joseph Ashworth, in reply to my queries on this quarry, which at once convince me that he intends to adhere to his former statements, as being genuine. Now, in reply, I beg to tell him that it does not signify to me from what quarter such reports come. If I observe them, I first take the liberty to ask fair questions; and if fairly answered, there it would end; but when I see parties publish erroneous information, and attempt to bear it out, I shall follow them, and I will defy any one to point out a single instance where I have done so that it has not ultimately proved correct. I have no knowledge of Mr. Joseph Ashworth, but his remarks caused me to conclude that he had either erred in figures, or had but little knowledge of the business he is engaged in. With regard to the quality of the rock on the other side of the globe, I beg to tell him that I have not as yet been round to see in fact, I have seen almost sufficient on this side to satisfy me to ask a few questions, but I received evasive answers, similar to those of Mr. J. Ashworth. In reply to them, I gave the quarry its fair and honest due, and ventured to hint at what would be the result. About a year and a half afterwards, a gentleman from Exeter called on me, to know if I was the person who made the remarks respecting Penquean Quarry, through your Journal. On my informing him in the affirmative, he said he was deputed by the company to find me, and ask if I would meet a deputation of the committee on the quarry, as every word I had written on the concern had proved correct.

The day was appointed. I met the gentlemen on the spot, and with them minutely examined the quarry, when I informed them that it was valueless to them to work as a company, as it was only a quarry of the last class, such as should be worked by three or four labouring quartermen, to meet a small country sale; and also that they had better sell the materials, and abandon it. This certainly took them by surprise. They were aware that they had been guided, but had not the slightest idea it was to that extent. The promoter and manager (with whom I before had the contention) being present, tried to induce the company to carry it out, stating that it would ultimately prove a valuable undertaking. On his being requested to withdraw, I proposed to test its value at once, by proposing to let to him the quarry, with all the valuable, such as the tunnel, machinery, &c., he paying the lord's rent and out, and, in addition, I think something less than 50s. a year to the company, to meet the interest of 30,000s. For a considerable time they would not consent, fearing they were throwing away a good thing; but ultimately they consented, and the foreman was called in, and the proposal made to him, which he at once refused. It was afterwards let to four or five labouring men, and by them given up.

Now, if the Penquean Company were to adopt the same plan, and offer Mr. Joseph Ashworth, the manager, this quarry, he paying rents, rates, and out, and giving the company 25s. per acre for their outlay, will he take it off their hands?

I have no doubt his first excuse will be that he has not sufficient capital to carry it out. Then, I say, let the company take the slate off his hands at the month's end, at the usual price of the district, and they dispose of it as they like. No cash would then be required from him, further than to get his own salary from it, by judicious management; the workmen would give him a month's credit. If he made a good thing of it, he would then deserve credit.

I would not ask Mr. Ashworth to inform us how many quarries in the west of England are paying expenses; and what is the reason they do not generally do so is not by ill-paid capital—such as making engine-cages only half the proper size, using wheel-kilns, &c.

My remarks to Mr. Griffiths will be brief, as my intention was not to injure real shareholders, but to rouse them to business, and to stimulate them to carry out their concerns, so as to make it pay. Mr. Griffiths may have other interests in it more, but I think it a mere shareholder. He that as it may, he should first have asked my remarks on this quarry before he attempted to put questions respecting other concerns, over which I have no control, or means of knowing their outlay, as they do not publish their reports. The country talk is, that they pay 8 per cent.; but this I can tell him—I estimated that 20,000s. spent on the quarry would bring it into a fair working state. When we had spent about 15,000s., it was proposed to have a tramway to Padstow, to which I had no objection; but some portion of the company were not satisfied with that—they wanted a locomotive railway. To this demand I demurred, sold out my interest, and left.

The Act and expenses for this railway cost from 6000s. to 8000s., and the ground was not yet found. Then they unexpectedly became involved in law to avoid which they had to give about 20,000s. for the quarry, since which they have purchased the land of the Barton of Delabole. Now, these large amounts of capital should not be saddled as outlay on the quarry.

In conclusion, I think, in fairness, I have a right to ask Mr. Griffiths how long

they have been working Penquean Quarry? What is their outlay? What slate has been returned? Do they work it in a business-like manner, and endeavour to get good interest for their money? After he has answered these queries, I may, perhaps, scrutinise the matter a little further.

I see many quarries that are fair speculations, but the money is ill-spent, just as "B. (a Shareholder)" says is the case at the Poltimore Mines. N. ESSON. Westmease, Feb. 13.

### NOTES ON PRACTICAL MINING—No. V.

Sir,—Having in my former letters made a few remarks on the underground department, I intend in the present and succeeding ones to make a few on the water or surface treatment of tin, copper, and lead; and as it must be done separately, it follows that the present one should be devoted to tin, which, if separated in breaking, as far as possible, in accordance with my suggestions on the underground department, will be of material advantage to the dressing; but as it is not likely to be the case, I must suppose the general rule to be pursued of breaking altogether, which, when brought to surface, is what is commonly called spalled—that is, broken to a certain size, and submitted to the stamps without any distinction. This course I consider to be injurious to the ore in more than one instance. In the first place, whatever of a solid nature it contains will be reduced in value, and undoubtedly the stuff, as submitted to the stamps, will contain much which will be worthless to pulverise with the ore; this would be the means of reducing it in quantity, inasmuch as you cannot pulverise two characters together without having one partake of a portion of the other, and consequently reducing it in value and quantity. The course I would suggest to be pursued would be, that the stuff, when drawn to surface, should be submitted to a process similar to the treatment of copper ores; and, if the fall permitted, three cast-iron washing plates, with perforated holes of different sizes, should be laid down in succession, and with such a fall as to allow the stuff passing through one to pass out on the other, the number of plates being regulated according to the fall which can be obtained. The stuff drawn should be thrown on a strike with iron bars, in order to be separated with a stream of water falling on it; the stuff passing through these bars will pass out on the first plate, and so on in succession, until it is of such a size as to be submitted to the jiggling apparatus. Immediately behind the last plate should be a receiver for the stuff which passes through, and, adjoining, a catch-pit, to receive the slime; alongside these should be tables, on which should be thrown the stuff caught on the plates, to be separated by girls acquainted with the ores and the characters they contain. In most instances the work will contain three qualities, which we may term first, second, and third; the first, whether obtained from picking, jiggling, or other ways, should be submitted to the stamps, and pulverised together, with a very fine grate; the crop of this can then be easily taken out with the usual process of dressing, for which you will receive the full price such tin is calculated to bring. The leavings or tails, as they are commonly called, should be again submitted to the stamps, to be pulverised with the second quality, with a finer grate; the tails of the second quality should also be pulverised with the third quality, with a very fine grate, or what is termed a flow. In many mines you will find the stuff broken to consist of jack, muddle, capel, &c., inasmuch as when dressed in the usual way it requires to be calcined twice, whereas by pursuing the course as above suggested, the crop being taken out, it will require to be calcined but once. Thus you will have the best quality and largest quantity, with less labour and waste of tin, and without being reduced in value. There are other mines situate in soft granite, clay-slate, &c.; in these is to be found a quantity of large grain tin, commonly known as diamond or resin tin. To submit this to the stamps as brought to surface must be an error in the extreme, inasmuch as the grain being broken with such soft fluid matter is a means prepared to carry it off in spite of every effort; but by treating it as before suggested, the soft fluid matter passes off into reservoirs or catch pits, leaving the grain behind, to be treated separately as required; the soft fluid matter, as before, being taken out, and the process without stamping. Mind we are not to be deceived by these facts when, on taking a survey of the tin mines in Cornwall and Devon, we see many parties doing well by working and re-working these leavings; and, if this will not, may we not be referred to what is termed the flow at Great Wheal Vor; undoubtedly a vast quantity is deposited, as late reports from the agents prove, which might be taken out in the first instance. True, this was done in days gone by, when mining had not risen to such a pitch as at present. And may it not be hoped that, as mining has made such progress in every other department, it will not be backward in this.—Kenmare, Feb. 12. MATTHEW WATLEY.

P.S.—I was very much pleased with a remark of Mr. R. Tredinnick, on the mines in Cornwall and Devon, were he states, "Sets unworried as ten thousand times more worthy the investment of capital than any mine of the rubbish issued at large price to the public." I must say I fully agree with him; and it is with the greatest surprise that I have not seen the subject commented on before, and that public attention has not been directed to the fact, that our present best dividend-paying mines were once abandoned. And I hesitate not to say there are mines in Cornwall, in addition to those enumerated by Mr. Tredinnick, which would, with an outlay of 10,000s. or 12,000s., pay dividends, and be found permanent and remunerative concerns; and real practical men are to be found well acquainted with them, who would engage in them with as much confidence as Capt. Davery did the Consolidated Mines, in Cornwall, Mr. J. H. Hitchens did Devon, and, as then, we take their remuneration out of net profit. And yet nothing is more difficult than for a real practical man to obtain the support of the public. I have had some thoughts of introducing a concern, of which not the least doubt need be entertained; and yet, when I consider the many obstacles a Practical meets with, it almost deters me from doing so. I do not mean to say all old mines will do to re-work: some may be sufficiently tried; the surface formation of others may indicate deposits deeper, but may be subject to internal causes; but where everything internal and external agrees with the laws of Nature, and former returns also, you have little to fear.—M. W.

### COAL MINING IN NORTHAMPTONSHIRE.

After what we have at various times remarked, and inserted, on the prospects, and the vast general importance justly attached to the discovery of new coal fields beneath the secondary formations of England, and especially as regards the very satisfactory steps already made towards its ultimate solution, near Northampton, we need hardly remark that we have pleasure in inserting any observations in our columns that may have a tendency to elucidate the subject, and therefore introduce the following, from a local paper, to the notice of our readers, as somewhat prominently exhibiting the actual nature and character of the Kingsthorpe undertaking, in its present stage of physical progression:—

Sir,—Having pursued with great interest the discussion entered into by your correspondents, "O. P. Q." and Mr. Holdsworth, on this very important topic, and since Mr. Holdsworth has announced that no further notice will be taken of "O. P. Q.'s" communications, I cannot refrain (as a lover of fair play, and as one of the thousands deeply interested in the successful solution of the great problem in question), from observing that "O. P. Q.'s" reply is, for the most part, not only strongly tinged with prejudice, but is futile and disingenuous; briefly,

1. Because, in his first attack on the Kingsthorpe undertaking, he laboured to impress the public mind that science disavowed the idea of reaching the coal formation from thence, and even, by certain far-fetched illustrations, endeavoured to render as questionable the fact of the discovery of red marl there; but being driven from these false positions, he now assumes that the magnesian limestone is there present, and the lower stratum of new red sandstone will be found of great thickness, although he does not admit (as shown by Mr. Holdsworth), that the penetrated superincumbent coals and lias have been greatly denuded by diluvial action.

2. Because, although "O. P. Q." reiterates his opinion—that the coal formation extends to beneath Northampton, he affirms (the very reverse of the truth, as very commonly exhibited in nature) that the series is more local or inconsistent than any other of the secondary formations; yet, oddly enough, immediately after qualifies his former concession, by observing that the coal series are so usually to be depended upon. "O. P. Q." evading all reference to Mr. Holdsworth's most important statement of the fact of the magnesian limestone, which in its course from the north disappears under the red marl near Nottingham, having been proved to be altogether absent on the same line of bearing to the south, at Lord Maynard's coal pits, worked beneath 105 yards of the red marl in Leicestershire, as also from the Ashby coal field, still affirms that "almost certainly it will be found beneath the red marl at Northampton;" and moreover adds, the lower old red also; thus leaving it to be inferred by the uninitiated that the latter vast formation will also be found there above the coal, its geological position being invariably below the coal formation.

3. Because, in his anxiety to create an impression that a workable seam must be found at a great depth from the surface of the coal measures, he selects half-a-dozen examples of such seams being actually wrought at very considerable depths, taking care not to adduce one of the innumerable instances where similar seams, in consequence of their natural inclinations, deviations, &c., as providently disposed in all coal fields, are worked at various and very inconsiderable depths. The facts, however, as Mr. Holdsworth observed, would be most apparent to any one at all acquainted with the mechanical structure of a coal field, but which "O. P. Q." with a strange perversion, stultifies into "the structure of a coal-pit," and which he says he does think he has tolerably clear idea of;" and so has the butty collier, who doubles can boast of a much more intimate acquaintance with such dingy and circumscribed regions, than any correct or comprehensive views of the vast and varied structure of coal fields.

Lastly, I may observe, that Mr. Holdsworth has in no way attempted to understate the character of what he designates "this avowedly great undertaking;" but with a laudable desire to exhibit the practicability of achieving so great a boon to the community as the discovery of coal at Kingsthorpe, he has, by a clear and forcible line of argument and geological deduction, endeavoured to divert it of the sweeping generalisations of mere theorists, and has demonstrated that science rightly and honestly applied to the existing facts, &c., has in reality nothing at all to advance in discouragement of the enterprise. In fact, although "O. P. Q." has so palpably racked his brains and ransacked his library for facts and circumstances to condemn it, we now find the whole amount thereof resolved into a mere assumption of the presence of the magnesian limestone, and a thick slice of the lower division of the new red sandstone, unconformably lying upon the coal measures, which he repeats he is of an opinion are there. And yet he would seem to deem it essential to summon a whole host of learned professors to decide on the aggregate thickness of these strata; considering, however, how greatly their announced geological estimates have been found at fault in the upper penetrations of colliery and lias beds, it is obvious that a few sturdy miners would compass such a business far more effectually; and by whom in fact, the grand question at issue can alone be satisfactorily solved.

If a love of truth has solely dictated "O. P. Q.'s" gratuitous public interference in this very important enquiry, why have his productions not been marked with the accordant spirit of fairness and due concession, in lieu of exhibiting a general tone of argument and geological deduction, and prostrate it? Or if, as we may suppose from his concluding words, he has yielded to the promptings of a generous nature, thus to step prominently forward as an avowed guardian of the public purse, why leave so studiously concealed his real cognomen, and deprive us all of the pleasure of saying "There goes the man." The only conclusion we can rationally come to on this point I imagine is, that he belongs to that modest but rare genus of philanthropists, who

"Do good by stealth,

And blush to find it fame."

F. G. S.

### SPARK ARRESTER AND WATER HEATER FOR LOCOMOTIVES.—MR. R. A.

Wilder, of Schuylkill Haven, Pennsylvania, has patented an arrangement for arresting the sparks from the furnaces of locomotive engines, and applying the products of combustion to heat the feed water before being applied to the boiler. It consists of an annular water chamber, immediately below the chimney shaft, into which the feed water is pumped; it is surrounded on both sides by annular chambers connected with the stack, through which the current of heated air and gases pass to the chimney, the sparks being arrested by a wire gauze screen at the opening into it. A pipe leads from the heating chamber to the boiler below, and as fast as cold water is forced into the bottom of the water space, the heated water passes off to the boiler.



## Mining Correspondence.

## BRITISH MINES.

**ALFRED CONSOLS.**—Field's engine-shaft is sunk 1 fathom 4 feet 6 in. below the 130 fm. level; the lode here is worth for copper ore 157. per fm.; the lode in the 130, east of this shaft, is worth quite 1104. per fm.; the lode in No. 1 winze, sinking under the 120, east of this shaft, is worth for copper ore 1007. per fm.; this winze is sunk 7 fms. below the level; the lode in the 120, east of this shaft, is worth for copper ore 81. per fm.; the south lode in this level is unproductive. No change to notice in any other of the outcrop since the last report. The tribute department looks well.—M. W. FRANKS: Feb. 12.

**ALTARNUN CONSOLS.**—There is nothing new, either east or west, in the back of the 20. The lode at the shaft is larger than when last reported, and is producing a greater quantity of muddle.—H. REYNOLDS: Feb. 4.

**BEDFORD CONSOLS.**—In the adit level we are driving by the side of the lode, at 41. per fm., the ground has changed from blue to white kilaas, which is considered favourable. At the whim-shaft, the lode is 7 feet wide, composed of good gossan and spar, with spots of yellow ore and peach, with muddle and stones of black ore, presenting every indication for a productive lode.—H. HOSWELL; J. MITCHELL.

**BIRCH ALLER.**—Having been underground to-day, I beg to hand you the following as my report:—At Pye's engine-shaft we have put in the pent-house, stripped down the piece of ground, and commenced to sink below the 50 fm. level. In the 50, north of Pye's shaft, the end continues nearly all lode, which is thickly sprigged with lead, in a soft muddle and white kilaas, with veins of quartz disseminated throughout. I like the look of the lode and its matrix here very much indeed; there is a large quantity of water issuing from the end, and the ground is of an easy matrix for exploring; therefore, I am in daily expectation of cutting more lead in this end; the south end of the same level is without any material alteration since my last report, save that on the footwall there is a soft decomposing barytes, and the strata of ground appear to be changing, which I hope will be for the better. In the 40 fm. level, south of Pye's shaft, the lode, in my opinion, has made a little improvement; there is more spar in the barytes, and is becoming more of a sandy lode, which has been found to be most congenial for lead, especially in this district, and there are occasionally good stones of lead imbedded in the quartz and barytes. The engine and all the machinery on the mine are working very well.—G. R. OGDON: Feb. 10.

**BOILING WELL.**—Since my last report, we have sunk the engine-shaft 4 feet, at 284. per fm.; we are sinking with an 8-inch lift, which will keep the water very well at present. In cutting through the lode in the 50, we have cut a regular wall, underlie about 2 ft. in a fm.; I think this is the north wall of the lode. This part of the lode will produce good stones of ore; but I hope to give you a more satisfactory account of it in my next report, as we shall by that time have opened west on it. We have driven east on the south part altogether 4 fms.; this end is improving, producing about 1½ ton of ore per fm., lode 4 feet wide, with two regular walls. The eastern end in the 40, on the south part, is still producing about 1½ ton of ore per fm.; the average driving of this end is about 3 fms. per month, by six men. We are also driving on the north part of this lode, which is producing good stones of ore. The eastern end in the 30 has a promising appearance, producing good stones of ore. The tribute pitches are looking well, and I have every reason to think that we shall have a good sampling.—G. REYNOLDS: Feb. 10.

**BOLENOVE.**—The lode in the 50 and 40 fm. levels, driving east, continues large, but without any particular alteration since last reported.—W. ROBERTS: Feb. 10.

**BRONFLOYD.**—The ore in the forebait is improving, but the best is on the south side. The lode being so wide, I have put a pair of men to blast that side down, so that we may clearly see the most profitable part of our lode to drive upon. The air is bad, owing to the front impeding the action of the fan.—J. JONES: Feb. 15.

**BRYNFORD HALL (HOLYWELL).**—An important discovery has been made since my last report in the 50 fm. level, driving for the 1st w. vein, in the limestone, with a field of from 4 to 10 tons of ore per fm. We have to-day commenced driving to communicate from a level driven to within 5 fathoms of the discovery, by which we shall ventilate the workings, and be within 40 fathoms from the drawing shaft. At Matthews', in stripping down the shaft, a rib of ore 3 in. wide has been opened upon, which will pay a little profit; and for the completion of this work to the present bottom level, now within 3 fathoms. The Chert vein continues promising. A pump is now set from the day level to come down on the vein as far as the 50 fm. level, now being driven east, which will be a trial on the vein, and serves as a communication for air in driving the level. The other operations are in active progress.—W. FRANKS: Feb. 9.

—We are 2 feet further into the ore, without alteration, and shall make all speed to get a lot of ore ready in the course of a month.—W. FRANKS: Feb. 13.

**BRYN-Y-FEDWEN.**—The following is an account of work done at this mine in the last fortnight. In the 26 fathom level, on the Cae Conroy lode, 14 fms. west of shaft, a cross-cut has been commenced, and has been extended north 2 fms. 4 ft., but as yet we have not discovered any other part of the lode; we intend to push out this cross-cut 5 or 6 fms. further north, so as to ascertain if any other part of the lode has been thrown off in that direction by the slide we met with in driving the level 4 fathoms west of the shaft, and which disordered the lode so much at that point. The ground is favourable for driving; we have set the cross-cut at 31. per fathom. The deep adit level, on the south lode, has been driven west on its course to-day, and is driving in the present end of this level is about 4 feet wide, composed of spar, blende, and spotted with lead ore, but not to value at present; the lode in this level is much stronger than in the 20 fathom level, but is not turning out so productive. The 20 fathom level, driving west of the winze, on the south lode, has been driven west 2 fms. 1 ft.; the lode is about 3 ft. wide, showing some nice spots of ore at times, with a promising appearance. A winze has been commenced in the bottom of the 20 fm. level, 16 fms. behind the present end, and has been sunk 1 fm. 3 ft.; in addition to this sinking, we have had to cut down the north side of the level, about 4 fms. in length, so as to give the end proper room to wagon the stuff; the winze is now in a good course of sinking below this point, by six men, with a lode about 3 ft. wide, producing about 12 cwt. of ore per fm.—Feb. 12.

**BRYNTAIL.**—The lode at the shaft sinking under the 10 fm. level, on the new lode, is small, but contains a leader of ore. The 10 fm. level, driving east of the shaft, has been in a hard part of ground during the past week, in which the lode has been small and unproductive. At present there appears to be a change in the strata, and the lode is getting larger; this leads me to expect that it will shortly be productive again. The stopes west of the shaft are still producing ore, consequently the stopes in the back of the 10, east of shaft, is not yet commenced.—J. ROBERT: Feb. 14.

**BUTTERDON.**—The engine-shaft is sunk 5 fms. 5 ft. below the 30 fm. level. The eastern part of the lode in the shaft is some 4 in. wide, producing good bits of lead; the western part has not been taken down for the last week. The lode in the south end, in the 30, is 1½ ft. wide, composed of can, soft spar, and peach, intermixed with kilaas and lead.—W. JENNIN; W. BRYANT; T. GREENFIELD: Feb. 13.

**CALSTOCK UNITED.**—Since last report, the sumpmen have been engaged in securing the shaft, and fixing a 6-inch lift of pumps on the sump, which is completed and at work, keeping the water low to sink with more speed, as the water will now be drawn from the bottom by the engine. We shall commence sinking again on Monday with all possible dispatch.—J. KERNICK; W. COOK: Feb. 10.

**CAMBORNE CONSOLS.**—There is no material alteration to notice since last report.—W. ROBERTS: Feb. 10.

**CARRAGHOVA (LANTYNNON).**—The lower level is improving in copper and lead of good quality. Hugh Davis's is most excellent, with good lead and copper, 3 yards wide, and 3 ft. deep. I have set four men to sink the sump 3 yards deeper. The weather is against us for dressing, on account of the severity of the frost. The mine all through looks most promising, better than I anticipated.—J. LESTER.

**CARVANNALL.**—At the engine-shaft, sinking under the 106 fm. level, the ground is improved; the lode is 2 ft. wide, kindly, with stones of good ore. Other parts of the mine are without alteration.—W. ROBERTS: Feb. 10.

**CEFN BRWYN.**—In consequence of the water being in the mine, occasioned by the severe frost, little has been done during the past month. The lode in the deep adit level east is 2 feet wide, composed of spar, blende, and clay-slate, with small branches of ore—nothing to value at present; but, during the past week, the lode at this point has produced some good stones of ore; the end is now taking a more northerly direction, and is not so good. Nothing has been done in the 35 fm. level, and the stopes over this level are being being in. The stopes over the 24 fm. level, 50 fms. west of Taylor's shaft, are 6 ft. wide, producing 1 ton of ore per fathom; the lode in the stopes over this level, 40 fms. west of ditto, is 5 feet wide, yielding 15 cwt. of ore per fathom. The lode in the winze and stopes in the bottom of the 12, east of Taylor's shaft, is 1 ft. wide, yielding 1 ton 15 cwt. of ore per fathom; the stopes in the bottom of this level, 25 fms. east of the shaft, is producing 15 cwt. of ore per fathom. The three stopes in the back of the 38, west of Taylor's shaft, were looking the same as last reported, when the water came in and stopped the working.

**CRAIGWEN.**—The lode in the stopes in the back of the lower adit has greatly improved this week; in the south-east end it is 2½ feet wide, with good stones of ore all through. In the north-west end it is not quite so large, but there is a good course of ore. To-day we have broken down the lode in the 10 fm. level, which is 3 feet wide, with a leader of ore on the footwall, and good stones of ore all through. The frost still continues severe, and has prevented us all through last week from crushing ore. The carpenter will put the last ladder to-morrow morning. After having the two brooks on the wheel, I shall be able to crush.—H. JONES: Feb. 14.

**CROSS GILL HEAD CONSOLS.**—The stopes in the back of the 17 fm. level continue to yield good work for grey and silver ore. Last week, we commenced a rise in the back of the level, on speculation, where but little ore could be seen; and the result is, we have got large rocks of ore more than 1½ cwt. each, which appear very rich for silver, and the best we have seen. The horse-whim will be erected as soon as possible. The best places for the crusher and stamps would be further down the burn than we at first talked of. We commenced dressing the ore, but were obliged to give over for the present, in consequence of the snow, and the roughness of the weather. We shall resume operations again as soon as it becomes practicable.—THOS. DICKINSON: Feb. 12.

**DEVON AND CORNWALL.**—The deep adit level has not yet reached the cross-course, but a change of ground appears to be in the end, which indicates its approximation. With regard to the object afterwards, the remarks in my last report are still applicable. The pitches are looking exceedingly well, and the tributaries will average good wages in their respective tributaries. On seeing the end in the middle level, I was surprised to find it so much improved; as it now stands it will produce 4 tons of copper ore per fm., and the quality is superior to any ever seen before in the level. In the cross-cut to the south of this there is nothing new as yet. The cross-cut at the Harwood shaft was inaccessible, owing to the bursting of the feed pipe at the engine, which let in the water; the accident, however, was merely trivial. It is thought proper to continue the cross-cut at this shaft to cut the next lode, which will be the work of another month after the present. I never visited the mine before under such prosperous circumstances, and taking the facts as they are is the best comment that can be given of the shareholders being remunerated for their outlay. A paper of ore will be prepared for market in a reasonable time.—J. HAMMOND: Feb. 13.

**DEVON BULLER.**—The masons have not been able to do anything to the buildings since last week, in consequence of the frost. The carpenters are preparing for the woodwork, and the quarries are raising stones; this is all that can be done until the weather changes.—W. NEILL: Feb. 14.

**DUNSEY WHEAL PHOENIX.**—We have taken down no lode in the stopes in the bottom of the cross-course since my last, and are still dressing. We thought of carrying away a batch of tin this week, but the very severe frost has prevented us from doing anything on the floors in the way of dressing.—J. SPANCO.

**EAST WHEAL GEORGE.**—I am happy to say that since the storm abated we have driven the mine to the bottom; the water in the bottom must be highly mineralised, when forked, we saw the rods in the bottom level were coated with a copper stain. Everything is working on regularly, with the exception of the dressing.—Feb. 10.

**EAGLEBROOK.**—We have cleared off the frost from the wheel and water-course, and put the wheel to work, but it continued working only for a few hours, in consequence of the weather becoming more severe. In cutting down the north side of the deep adit level, 29 fms. west of the old engine-shaft, we have opened out on the ore 5 fms. in length, which will produce 18 cwt. of lead ore per fathom. The ore is now making itself fast away from the level; there is a horse of ground, standing 6 feet wide between it and the level. I have now put men to drive on it. The deep adit level east is now extended 18 fms. from the cross-cut; the lode in the present end is composed of gossan and quartz, with stones of copper ore, but not so productive as when last reported. In the cross-cut, driving south towards the middle shaft, no alteration has yet taken place—ground still very hard.—HENRY TRACY: Feb. 13.

**EAST WHEAL LEISURE.**—We have cut through the lode in the 30 cross-cut north, which is about 4 feet wide, and is composed of priam and quartz, with good stones of ore; we consider it a strong and kindly lode, and of a good size; we shall now put the men to drive west on it, and hope soon to meet with better ground, when we think there is a good chance of finding a good lode; as the end is now wet for driving, we think we had better keep the sumpmen in it a little longer, as they are likely to get on with the end a little faster than our other men. This is an important point with us, if we can cut anything worth notice in this level: we can soon put the sumpmen back in the shaft, and the course then to pursue will be a very plain one. There is no alteration in the south cross-cut. On Monday we shall be in course to begin the sinking of the north shaft under the shallow level, on the course of the lode. We shall have about 14 fms. to sink to get to the 30 fm. level; this will be proving the lode, and will also ventilate the 30 fm. level.—Feb. 10.

**EAST WHEAL RUSSELL.**—The 55 east continues very promising, the lode being composed of canels, spar, priam, muddle, with stones of copper ore. We have no part of the lode rich enough to save for dressing. We have no improvement in any other part of the mine. Our present workings all through the mine are progressing very satisfactorily.—W. METHERELL: Feb. 15.

**GARREG.**—We are progressing very favourably with the new engine-shaft, and have got into dark blue shale, filled with muddle, intermixed throughout the whole strata, and good stones of lead ore, from 1 to 10 lbs. in weight, are met with in sinking. The present ground is very congenial for lead ore. We have commenced a small winze in the west end of the bottom of the 40. We are now 4 ft. deep, and it is producing good lead ore. The pitch in the back of this level is improving; the lead appears to be more in branches than a regular lode in the roof. Our dressing department is suspended, owing to the weather.—W. RAMSDEN: Feb. 14.

**GAWTUN UNITED.**—We have been unable to do anything on the lode in the 36 since Monday morning last, in consequence of the very severe weather, which has completely frozen up our lode, wheel, &c. Up to the time the lode presented a very promising appearance, and from which some fine stones of ore were broken; we hope when the weather will again admit of working, to forward something encouraging from this place.—H. HOSWELL; J. MITCHELL: Feb. 15.

**GLANSEVIN.**—The shaft is now 8 fms. deep, and as the water is too quick to admit of its being sunk deeper without machinery, I have put the men to drive a few fathoms southward on the course of the lode. In the end the lode is 4 ft. wide, and contains very large vugs; it is composed principally of gossan and spar, with occasional good stones of lead. There is an east and west branch a few fathoms south of the shaft, and it may be advisable to extend this level so far as to intersect it, which will be accomplished in a few days; the lode is of a promising character, and I think will not fall to be productive at a deeper level, which, however, cannot be proved without the aid of machinery.—W. H. REYNOLDS: Feb. 12.

**GREAT SOUTH TOLGUS.**—The lode in the 90 fathom level is 1 foot wide, worth 84. per fm. In the 70 fm. level no lode has been taken down in the past week. We should like to drive up our lode, wheel, &c. Up to the time the lode presented a very promising appearance, and from which some fine stones of ore were broken; we hope when the weather will again admit of working, to forward something encouraging from this place.—H. HOSWELL; J. MITCHELL: Feb. 15.

**GREAT TREGUNE CONSOLS.**—There is no material alteration in the ground at Hobbler's shaft since my last. We have discovered another dropper, or branch, in the south side of the shaft dipping towards the lode; these branches are favourable indications. The ground at Carke's shaft is still soft for sinking, lode still large, and the indications similar to last report.—J. SPANCO.

**GREAT WHEAL ALFRED.**—The lode in the 170, east of Painter's shaft, is 4 feet wide, containing good stones of copper ore. The lode in the 160, west of Painter's shaft, is 4½ feet wide, and will yield about 2 tons per fathom. The lode in the 160, east of Painter's shaft, is 2½ feet wide, and is producing good stones of ore. The lode in the 145, west of Copper-house winze, is south of the present end, now driving on the north part, to get under Copper-house shaft. The lode in the stopes in the back of the 148 will yield 5 tons per fathom. In the 148 cross-cut south we have cut a branch, which we do not think is the south lode. Copper-house shaft is sunk 12 fms. below the 137. In the 142, driving north through the lode, we have not cut the north side; the lode is hard, and much water issuing therefrom, containing good stones of ore, but irregular. The tributaries are working regular.—T. RICHARDS: Feb. 14.

**GREAT WHEAL VOR UNITED.**—On Monday last the lifts at Crense's shaft were dropped upon the stuff on the sollar below the 70 fm. level; and by Tuesday next we expect the water will be in fork as deep as the bottom of the lifts. The engine is working well, and forking the water satisfactorily. Crense's shaft will be ceased down, and there is also a nice dry ground on the north end, and I have no doubt it will soon bear lead. We have sunk a small shaft upon a branch lode 7 fms. deep, and have met with the lode; the lead looks very well, it is in fine gossan and clay, and produces 16 cwt. of lead per fm. All our surface operations are suspended, owing to the frost.—W. RAMSDEN: Feb. 14.

**GREY MARE IRON MINE (ST. WINNOW, CORNWALL).**—We have completed clearing the south level, and have got in doing so about 20 tons of very good ore; the lode in the end is about 5 feet wide; the quantity per fathom I shall be able to state next week, as four men will be put to drive on the course of the lode on Monday, and in a fortnight's time I shall be able to draw the stuff from the enlargement of the bob-pit, in the 80 fm. level, in the course of next week. The tributaries are working well, and getting fair wages. On Growse's lode, the stopes in the back of the 19, east of sand-bank, are producing good work for tin; the stopes in the back of this level west are also producing good work. At Wheel Metal, the 60 fm. level, west of the engine-shaft, is driven 5 ft.; the lode has been improving throughout the week, and is now worth 704. per fathom. The stopes in the back of the 50, west of engine-shaft, have improved during the week, and are now worth 304. per fathom. The works in Trow, Polroase, and Polldras adits are progressing favourably.

**HERODSFOT.**—The 82 east and south. I am glad to say is much improved, and there is a fair prospect of having a course of ore in this part of the mine again; and as it may hold up to the surface, there seems to me to be a probability of our having a new mine, and that we may have to remove the machinery to it. The 137 and 106 ends are being driven by the side of the lode, and we think when it is taken down it will prove to be profitably productive. We have eight stopes now working, by 32 men, which will on an average yield 8 cwt. of ore per fathom. The price for stoping being 60s. per fm., at the present price of lead these stopes will yield a little profit, but not much. The 137 and 106 ends, however, are going under ground that has been more productive, and we hope, therefore, for improvement in these two levels.—J. WOLFEAST: Feb. 8.

**HILL BRIDGE CONSOLS.**—The ground in Wheal Jewel shaft is still favourably for sinking; the lode is still large, and shall take down the most ore part of it this day, which is the south part.—J. SPANCO.

**HOLMBUSH.**—The lode in the end in the 145 west, on the Holmbush lode, has improved, and is again yielding 1½ ton of ore per fm. The progress in the cross-cut fortnight's time I shall be able to give you a more satisfactory account of. The lode is composed of grey and purple ore.—No. 4, two men, price 15s. per fathom, stopes in the back of the 12 fm. level—gossan and grey ore.—No. 5, four men, price 15s. per fathom, winze under the 12 fm. level sinking by the side of the lode.—No. 6, four men, price 7s. 6d. per fathom, stopes in the back of the 12 fm. level, west of McDowell's shaft, lode large, and mixed with quartz and yellow ore. The above are all the bargains we have set to-day, the men in the 37 and 17 fm. levels not having finished their bargains. Number of miners employed, 22; labourers and windlassmen, 22; making 44; six men in the 17 east, and four in the 37; making a total, exclusive of fillers, &c., of 54 men. In a few days we shall set more bargains to drive, sink, and stopes, without increasing the number of men. We shall soon be in good working order.

—Since survey-day there is but little change to notice. The middle level, east of the new winze, is laying open ground which will pay well hereafter to stopes. We also expect to raise a good quantity of ore west of McDowell's shaft as soon as we can effect a communication with the 17 and 27 fms. levels, which will facilitate very much the bringing the ore to surface. Owing to the frost, our principal operations at surface are confined to cobbing, with the machine, a good heap of stuff for the crusher.—WILLIAM THOMAS.

**KILRAIN MINES.**—In the underground department, during the last three months, we have driven the 8 fm. level east 11 fathoms; the last 7 fms. are a strong and profitable lode; this level is being driven by reason of its getting into shallow ground; the lode in this level is 2 feet wide, of a promising character, thereby showing that it still contains its productive quality going east. The engine-shaft has also

been enlarged to its proper size, and sunk 1 fm. 5 ft. 6 in., the lode in which is disordered; the last 5 feet sinking has produced a large quantity of blende, with spots of lead ore. At the surface, the boiler-house walls have been built, and the flues partly finished; the wood work is likewise fixed for the roof, but the frost is so severe at present that no masonry can be done. The erection of the engine has also been proceeded with as fast as the smith and carpenters can get the work ready for the engineers.—E. ROBERTS: Feb. 6.

**LACKAMORE MINE.**—The weather here has greatly changed for the better. Our engine, by the recent frost, was idle more than 24 hours, and allowed the water to rise 2 fathoms, but it is now at work, and we hope by this day week to fork the water again. On Saturday last, our setting-day, the 18 men working in the open pit continued their old take, at 34. 10s. per ton, to the end of February. The two pitches in the 10 fathom level are now worked into one, which is much to the advantage of the tributaries. I have set the ground to six men, at 34. 5s. per ton, which is 10s. less than they had last month. It is good tribute ground, and I have no doubt of its continuance. The men are getting on well in clearing up Benny's shaft. We are also clearing up Killey's shaft, and are finding some excellent stones of ore amongst the old rubbish. We have the same number of men on tribute as last month, but we hope, after we have forked out the mine, to be able to set many other pitches equal to, and others far exceeding, the one at the 10 fm. level. We have now 55 tons of copper ore at Limerick, 31 tons of which is dredge ore, worth about 5s. per ton; 4 tons of best ore, worth about 20s. per ton; 20 tons of alum ore, worth about 5s. per ton. We have also about 10 tons dressed on the mine, just the same average quality, and several tons not dressed, which would have been done and carried to Limerick, but for the state of the weather.—Feb. 6.

**LAMHEROEE WHEAL MARIA.**—The lode in the 40 fathom level west still keeps its size, about 5 to 6 feet wide, and producing a little copper ore, with abundance of muddle and capel. The 40 east is still driving on the north side of the lode, in a congenial looking kilaas, intersected with small strings of lead and muddle, and carrying a branch about 1 foot wide, composed of flookan, spar, and capel, spotted with muddle and copper, and dropping towards the lode going down. We are making every effort to drive the 50 cross-cut towards the lode as fast as possible, but the ground is rather hard, which makes it slow for progress, in consequence of our meeting with floors of spar and capel. Our parcel of lead ores, weighed at Calstock Quay, on Friday last, was 14 tons 4 cwt.—Feb. 13.

**LEEDS TOWN CONSOLS.**—The engine-shaft is sunk below the 30 fathom level 6 fms. 5 ft., ground soft, and secured with timber. The 30 west is 3 feet wide, and poor; in the 30 east the lode is 4 ft. wide, with stones of tin, but not enough to value; it has a very promising appearance, and I am in daily expectation of an improvement. In the 20 south, by the flookan, there is a quantity of water, which must be coming from the easter part of the lode; the ground has been much harder of late, and this has been one reason of delay. You will see by the underground plan that the lode does not underlie so much east of the engine-shaft as it does west, and it cannot underlie so much east of the flookan as it does west, otherwise we should have cut it before now; I am certain we are not far from it. We have about 9 feet further to drive the 10 fm. level to get it under the shaft east of the flookan; we hope to accomplish this next week. The flat-rods are working well at Eley's shaft; I hope to give you the value per fathom of the lode here next week. In the winze sinking below the 20 fm. level, the lode is 4 ft. wide, worth to-day 12s. per fm.; here we are opening tribute ground that will work at 5s. in the 17. The masons came on the mine, but could do nothing, on account of the frost. The following is our setting-list for February:—The engine-shaft to sink below the 30 fm. level, by eight men, 2 fms., or the month, at 12s. per fm. The 30 to drive west, by four men and one boy, 3 fms., or the month, at 60s. per fm.; the 30 to drive east, by four men and one boy, 2 fms., or the month, at 90s. per fm. The new winze to sink below the 20 fm. level, by four men, 2 fms., or the month, at 6s. per fm. The 20 to drive south by the flookan, by four men and two boys, 2 fms., or cut the lode, at 60s. per fm. The 10 to drive ditto by six men and two boys, 2 fms., to get it under the shaft east of the flookan, at 60s. per fm. Eley's shaft to sink under the adit, by six men, 2 fms., or the month, at 10s. per fm. The following comprises the ground driven and sunk since the last survey-day:—Sunk the engine shaft 2 fms. 1 ft. 6 in.; the new winze 3 fms. 1 ft. 2 in.; Eley's shaft 3 ft.; driven the 30 west 5 fms. 1 ft.; the 30 east 3 fms. 1 ft. 2 in.; the 30 south, by the flookan, 6 fms. 4 ft. 10 in.; the 10 ditto 6 fms. 1 ft. 1 in.; total driven and sunk during the month, 28 fms. 1 ft. 9 in.—P. PASCOE: Feb. 13.

**LYDFORD CONSOLS.**—Since last report nothing has been done at Richards' engine-shaft, owing to the very severe frost, preventing the wheel working. The shaftmen are engaged in the cross-cut, west of the shaft, and in the north adit end, where the lode is 3 ft. wide, composed of flookan and small spots of lead—a kindly lode.—J. RICHARDS: Feb. 15.

**MERLYN.**—The 26 fathom level, driving north, is 2 feet wide, producing a few good stones of lead. Our pitches are without alteration since my last report. At Bryn Ferrod, we have been drawing the water since Monday, and it is still 14 ft. deep in the bottom level; we shall continue until we get the whole of it out, then I will report more fully upon it. I expect in a few days to be able to put several men to work, and commence raising lead and copper ores. We retain possession of the three mines without any interruption, and I have no doubt they will prove of good value to the Merlyn Mine. We have had our boiler repaired, and the engine began pumping yesterday morning, at eight o'clock. The dressing department is still suspended, owing to the frost.—W. RAMSDEN: Feb. 14.

**MICHELL.**—We have opened the No. 3 shaft, sunk by the old men. We have got down to an old level, there is a cross-cut level upon the south end 2 in. wide; there is also a nice dry ground on the north end, and I have no doubt it will soon bear lead. We have sunk a small shaft upon a branch lode 7 fms. deep, and have met with the lode; the lead looks very well, it is in fine gossan and clay, and produces 16 cwt. of lead per fm. All our surface operations are suspended, owing to the frost.—W. RAMSDEN: Feb. 14.

**MOLLAND.**—The lode in the winze sinking below the 62 fm. level is large, and appears to be approaching to a more settled state; the ground, however, has not changed for the better, as I expected. The stopes in the back of the 52 east are worth 9s. per fm. The stopes in the back of the 42 east are worth 11s. per fm. The pitch in the back of this level is poor. The lode in the winze sinking below the adit in the eastern hill is 1½ ft. wide, and although not so ore as it was last week, yet it is still a kindly lode, producing stones of good quality ore. The weather is very severe, consequently but little can be done on the floors in the dressing department.—T. B. BENNETT: Feb. 14.

**MOSTYN.**—In the 10 fm. level, driving south, we have met with a lode 3 ft. wide, composed of gossan, clay, and muddle, producing stones of lead, with good sizes of muddle in the lode. We have met with a new lode branching from the south lode, and is a nice dry ground on the north end, and I have no doubt it will soon bear lead. We have a small string of lead ore upon the hanging side of the lode. Muddle in this part is a good indication for a strong body of lead ore.—W. RAMSDEN: Feb. 14.

**MOUNT'S BAY CONSOLS.**—The cross-cut driving south, in the 35 fm. level, has been driven in the past week 4 ft., ground hard for driving. The cross-cut north, in the 25, has been driven 5 feet, ground much the same as last reported. Ditto south has been driven 6 feet, ground continues much the same. There is no alteration to notice in the levels driving on the course of the lodes.—J. RICHARDS: Feb. 14.

**NORTH DOWNS.**—No alteration has taken place in the pitches since our last report. The tributaries are engaged in removing their ores, to prepare for sampling, which, we fear, will not take place until a week later than the usual time, in consequence of the severity of the weather. At East North Downs, Bennett's shaft is sunk within 18 inches of the 10, and we fully expect to hole on Monday or Tuesday next.—J. PRICE: Feb. 10.

**NORTH TOWY.**—In the 10 fm. level, of a highly promising character; it contains about 3 cwt. of lead per fathom, is gradually improving, and from its present appearance, there is every reason to expect a good body of lead ore. The stopes yield about 1½ ton of lead ore per fathom. We have large piles of work at surface and underground, but the frost and snow prevent us dressing them.—W. H. REYNOLDS: Feb. 10.

**NORTH WHEAL BASSET.**—I beg to hand you a copy of to-day's outwork setting:—Lyle's shaft to sink under the 102 by nine men, at 45s. per fm. The 102 to drive west of Lyle's shaft by six men, at 44. 10s. per fathom—lode unproductive. The 82 to drive west of Lyle's shaft by six men, at 16s. per fathom—lode unproductive. The 72 to drive west of Lyle's shaft by six men, at 14s. per fathom, driving by the side of the lode. The 62 to drive south of Lyle's shaft, on the cross-course, by two men, at 34s. per fathom. The stopes in the back of the 52 by six men, at 17s. 6d. per fathom; the lode worth 50s. per fathom. The stopes in the back of the 52 fathom level, by six men, at 11. 10s. per fathom—lode worth 60s. per fathom. The stopes in the back of the 52 by six men, at 11. 10s. per fathom—the lode worth 50s. per fathom. The rise in the back of the 52, against Grace's shaft, by four men, at 6s. per fathom—the lode worth 60s. per fathom. The rise in the back of the 52 fm. level, 50 fms. east of the rise against Grace's shaft, by four men, at 2s. 5s. per fm.—lode worth 30s. per fm. The new shaft to sink under the 112 by nine men, at 40s. per fm. The 112 to drive west of the new shaft by six men, at 6s. per fathom—lode unproductive. The 102 to drive east of the new shaft by four men, at 2s. 10s. per fathom—lode 3 feet wide, producing yellow copper ore throughout. The 30 cross-cut to drive north of Lyle's shaft by two men, at 6s. 10s. per fm. The bob-pit to cut in the 92, at Lyle's shaft, by four men, at 8s. per fathom. The 72 cross-cut to drive north of Miner's shaft by four men, at 8s. 10s. per fathom. Grace's shaft to sink below the adit level by two men, at 18s. per fathom. We have now 17 outwork bargains, employing 96 men.—J. GLANTWILL: Feb. 9.

**NORTH WHEAL ROBERT.**—I am glad to give you an excellent account of the mine, notwithstanding some interruption to our usual operations from the severe weather. The water-wheel being frozen, we can do nothing below the level until a change in the weather takes place. In the 42 fm. level the lode is now worth at least 5 tons of ore per fathom; in the rise in the back of this level the lode is worth 2 tons, and the stopes are yielding 2½ tons of good ore per fathom. The lode in the 30 and 4 ft. wide, and of a very promising character; the stopes in the bottom of this level are yielding 2½ tons of ore per fathom; and in the rise and back the lode is worth 1 ton per fathom. At the trial shaft, the lode is 4½ feet wide, and yields good saving work. It is beginning to make firm yellow ore, of such a character as leaves no doubt as to its leading to a rich course of ore. The mine, altogether, much improved, and never before presented such prospects of great results. I have the specification of the engine and all the drawings, so that we shall commence the engine-house immediately the weather becomes milder. Had the frost not been so with such severity, our next sampling would have been 100 tons; but, as it is, I hope to make a considerable increase.—J. WOLFEAST: Feb. 10.







dress. The holding of the mine enables us also to let down rubbish for filling the cavity from whence the ore is taken, which saves the expense of drawing it to surface, in consequence of which we shall now resume the driving of the 62 fm. level south, and bring back to the mine, and deposit what is not worth sending to the surface. The lode in the end is exceedingly kind, and indicating improvement. We have commenced to sink the engine-shaft under the 72 fm. level, and the ground is very favourable for sinking. The dressing the ore, and getting them fit for the market, have been very much kept back by the frost and snow, otherwise we should be ready about this time with 20 tons of rich silver-lead ore for sale. From different experiments tried to catch the light silver in the slimes, we have reason to believe that we shall soon be able to retain that portion of the produce to great advantage also.—J. FURRY; J. Goss.

**WHEAL ZION.**—The lode in the 50 fm. level east is much the same as last reported; the lode in the back of this level are still looking exceedingly well, producing rich ore, worth quite as much as stated in my last report. The lode at Richard's shaft is very promising, producing good stones of ore. The men are now engaged cutting pit; when this is completed we shall resume sinking on the course of the lode. We have no alteration to notice at the engine-shaft in the 66 fm. level east. In the 30 cross-cut south we have intersected the lode by about 9 fms. driving, and have the pleasure to say that as far as we have cut into it (which is about 2 feet) it is producing good saving work; this is about 100 fms. to the west of the ore ground, in the 50 fm. level, and must be regarded as a very important discovery, and a material feature as to the importance and permanency of the mine.—J. BAY: Feb. 11.

**WHITFORD.**—I went through this mine yesterday, and beg to forward you my report of the same. At No. 2 shaft, on adit level, I have set a pitch to two men upon a new lode; it is 10 inches wide, producing 4 cwt. of lead per fathom, with an improving appearance. At No. 1 shaft, in the 10 fm. level, we have been driving from the rock under the gravel, and have with occasional lumps of lead in the gravel. We have commenced to sink a small shaft in the gravel from surface, to try the ground, and to ventilate the other shaft.—W. RAMSDEY: Feb. 14.

#### FOREIGN MINES.

##### ROYAL SANTIAGO MINING COMPANY.

At Taylor's, the lode in the engine-shaft is about 6 ft. wide, and will produce 2 tons of ore per fathom, and has a more promising appearance than when last reported. In the 62 west we have cut the slide; the men are now employed rising in the back to hole to the winze sunk in the bottom of the 56; as soon as this is communicated we shall commence to drive south, to cut the lode west of slide. In the bottom of the 62 east the lode is 1 foot wide, producing stones of ore. The 56, south of west, is driving with all possible speed; we have not the lode as yet, but hope to have by the end of this month. In the 56 east, the lode is 4 feet wide, producing saving work. We have holed the winze from the 56 to the 62, east from shaft, and shall commence to slope east from the winze, where the lode is from 3 to 4 feet wide, and will produce 3 tons of ore per fathom. The lode in the end of the 44 west is split, by means of a horse of kila; the lode in the south part is 3 ft. wide, and in the north part 2½ feet wide; altogether, it will produce 5 tons of ore per fathom. In the back of this level the lode is 2 ft. wide, and will produce 3½ tons of ore per fathom; we have risen 3 ft. in the back. In the bottom of this level we have sunk a winze 6 feet deep and 13 feet long; the lode is 5½ feet wide, and will produce about 10 tons of ore per fm. for the length of the winze. Our progress is not so good as I could wish, as the ground is very hard, and it is taking a quantity of timber and time to secure it. Nothing has been done in the lode in the bottom of the 44 east, or the bottom of the 56 west, for the last fortnight, the hands being employed to drive the 56 south of west, and in the lode at the 44 west. The lode in the lode in back of the 35 east is 5 feet wide, and will produce 3 tons of ore per fathom.

**ANGELITA.**—The lode in the adit level, east of Discovery shaft, is 3 feet wide, producing 3 tons of good ore per fathom. We have commenced to sink a winze in the bottom of this level; the lode is 4 ft. wide, and will produce 3 tons of ore per fm. The lode in the adit level east is large, composed of iron, copper, and lead, and is very rich, and it is taking a quantity of timber and time to secure it. Nothing has been done in the lode in the bottom of the 44 east, or the bottom of the 56 west, for the last fortnight, the hands being employed to drive the 56 south of west, and in the lode at the 44 west. The lode in the lode in back of the 35 east is 5 feet wide, and will produce 3 tons of ore per fathom.

##### LINARES MINES.—[Received from Mr. Alexander Martyn].

**Paso Ancho, Linares, Feb. 5.**—The ground in the engine-shaft, sinking below the 75 fm. level, continues hard for sinking, and the lode much the same as before—large, and spotted with ore; in the 75 end, west of the engine-shaft, we are driving to cut the south wall; the lode is large, producing good stones of ore; the rise in this level is 2 varas 2 ft. 6 in. above the back, worth ½ ton of ore per fm. The 65 end is in advance of Romero winze 6 varas 2 ft., worth 1½ ton per fm. The lode in Don Carlos winze, sinking below the 55 fm. level, continues large, worth 2½ tons of ore per fm. The 55 end is west of Gomez winze 30 varas 1 ft.; this end continues poor. At Warner's shaft, in the 20 fm. level west, we have sunk below the old men's workings 3 varas 0 ft. 6 in., and being down to water, we have put the men to take down part of the lode standing to the south; the lode in the winze is worth 2 tons of ore per fm. In Victoria, pertaining to the 15 fm. level east is worth 15 cwt. of ore per fm.; and the 15 fm. level, driving west in San Francisco pertaining to the north lode, is worth 5 cwt. of ore per fm.—East of Engine-shaft: The 75 fm. level is east of Buendias winze 18 varas 1 ft. 6 in., worth 1 ton of ore per fm. The 65 fm. level is in advance of Cortes winze 15 varas 1 ft.; the lode is large, worth 2 tons of ore per fm. The men are engaged in cutting the pit for the new winze in this level east of Buendias, consequently have nothing new to report on. The 55 fm. level is driven east of Rodriguez winze 6 varas 2 ft., worth 2½ tons of ore per fm.; the side lode south in this level, and west of Rodriguez winze, is worth 1½ ton of ore per fm. At Thorne's shaft, the 55 fm. level west is worth 2 tons of ore per fm., in advance of the shaft 10 varas 12 ft.; and the same level east is in advance of the shaft 21 varas 1 ft. 8 in., worth 1 ton of ore per fm. In the cross-cut, driving north at this point, we have cut the middle lode, worth 1½ ton per fm. The 45 end, on the south lode, is east of Compan winze 30 varas, worth 1½ ton per fm. Esteban winze; on this lode, is sunk below the 45 fathom level 23 varas 2 ft. 6 in.; the lode is large, worth 1½ ton per fm. The 45 end, on the middle lode, is in advance of the cross-cut 42 varas 1 ft. 7 in., worth 1½ ton per fm. In the 45 end, on the north lode, east of Galeos winze, the lode holds large, worth 1½ ton per fm.; the end west, on this lode, is from the cross-cut 16 varas, worth 2 tons per fm. Sanchez winze, on the middle lode, in the 45 fm. level, west of Thorne's cross-cut, is below the level 21 varas 0 ft. 9 in.; the lode is large, but still poor. The winze in the 30 fm. level, east of Moreno, on the south lode, at Thorne's shaft, is 3 varas 2 ft. below the level, worth 1 ton of ore per fm. The 20 fm. level, on the middle lode, west of this shaft, is in advance of the cross-cut 5 varas, worth 1 ton of ore per fm. At Taylor's shaft, the 31 fm. level, on the north lode, is in advance of the shaft 40 varas 1 ft. 6 in.; the ground is moderate, worth 2½ tons per fm. The 31 end, on the south lode, is from the cross-cut 12 varas, lode poor. Alexandros winze, west of the cross-cut, on the south lode, is below the 31 fathom level 9 varas 2 ft., worth 1 ton of ore per fm. San Martin's winze, on the middle lode, east of Thorne's cross-cut, is below the 31 fm. level 13 varas, worth 15 cwt. of ore per fm. The tribute department continues much as usual, the pitches yielding a fair quantity of ore. We think January raisings will be rather less than the estimated quantity, 320 tons, and our calculation for February is 290 tons.

**AUSTRALIAN GOLD MINING COMPANIES.**—The following extract from the *Bendigo Advertiser* (Victoria) has been furnished by a correspondent:—"The arrival yesterday of a steam-engine to be applied to mining purposes, caused considerable sensation among the inhabitants of Sandhurst. We mentioned a short time since, on the authority of Mr. Clement, of View Point, that some extensive machinery was on the way from Melbourne, and might be shortly expected. It is the property, it appears, of the British Australian Gold Mining Company, of which Mr. Dyer is commissioner, and is intended for California Gold, where the necessary works have been for some time in progress, and a considerable quantity of water collected. It may, therefore, be expected to be at work in a very short time. It is not, we are informed, the intention of Mr. Dyer to use it as a quartz-crusher, although it is possible to apply it to such purpose, but for the extraction of gold from the drift in the old workings. The boiler is of tubular construction, and the engine of 12-horse power. The principle of the machine is that of the old indigo-grinder. It is, in some respects, similar to that of the Berdan's apparatus, the working being performed by balls revolving in a basin. The difference is, that while Berdan's balls crush at one point only, the revolution being performed by the basin, the balls in this case are propelled by an ingenious contrivance, completely round the basin, which is stationary. The process of amalgamation is simultaneous with that of the crushing operations, but without the application of external heat. The arrival of this machine, which is justly considered a most important event, was announced by the music of a German band. The Royal Hotel, in front of which it was drawn up for some time, was gallantly decorated with flags, and a large number of persons quickly collected to inspect the interesting stranger. The arrival of steam to be applied to mining purposes, is the highest gratification to every inhabitant of this district. A short time since we recorded the introduction of an engine by Mr. Iron, which is now being erected in Iron Bark Gully; and we believe that the powerful machine imported by the Anglo-Australian Company may in a very short time be expected to arrive."

**CALIFORNIA.**—The "manifests" of gold exported shows a decrease in the past year of \$5,377,974 from 1853, but which is accounted for, it is believed satisfactorily, by the drought of the winter. These "manifests," however, give but a very imperfect return of the gold which really left the country, as great quantities are carried away by passengers leaving by every steamer via Panama and Nicaragua, while considerable sums are also taken by passengers and remitted, for the purpose of commerce, by the masters of sailing vessels destined for the various countries on the Pacific coast, for the islands on the Pacific, and for China, and other countries, which it is not necessary to manifest. Nor do the amounts "manifested" by any means indicate the production of the mines. To ascertain this latter fact, we must add to the amount the gold taken away by the miners returning to Mexico by sea, as well as that coined in San Francisco, that used in the manufacture of jewelry, &c., and the amounts in circulation and hoarded in the mines and throughout the country generally. These latter amounts exceed the amounts exported, as "manifested." But the population of miners engaged in extracting gold, and a computation of their earnings, afford the most reliable data from which to form an estimate of the production. The number of miners is pretty well ascertained to be about 100,000. Taking them at this number, and allowing that each miner extracts \$5 a day—a moderate estimate—the aggregate amount of gold extracted in the year (counting working days only) would exceed \$30,000,000, and persons in the mines and in the towns, who are most competent to form an opinion, estimate this year's production at about \$100,000,000. We do not think this is over estimated.

**QUICKSILVER.**—Another of the mineral productions of California worthy of notice is quicksilver, from the mine of New Almaden, situated 60 miles south of San Francisco. The shipments in this year were 19,320 flasks, containing in gross 1,440,000 lbs., being an increase of 39,000 lbs. over the export of 1853. The quantity used in California for the amalgamation of gold is not great, and, as the quartz miners come to learn their business better, they will use less quicksilver than they do now. This mine is capable of yielding sufficient quicksilver for the consumption of the whole world, but, from local causes, the competition with the Spanish article, which is better known, its use has hitherto been almost entirely confined to Mexico, Peru, and Chili, for amalgamating silver ores, and to China, which takes a considerable quantity for various purposes. A shipment of 500 flasks has lately been sent to New York.

**FURNACE PLUGS.**—A correspondent of the *Scientific American*, on the subject of furnace plugs, states that the best which can be employed is a brass hollow plug, simply filled with lead, which will melt, and keep the shape of the steam boiler, the plug can be burned. Iron plugs have been tried, but in most cases the plug becomes altered in its chemical character, and the boiler is burned without melting the plug; even with brass plugs it is recommended to renew the lead every three months.

## The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, Feb. 16, 1855.

COPPER.	£. s. d.	BRASS (sheets).	p. lb.	10½d.
Sheathing and bolts . . . p. lb.	9 1 2	Quicksilver . . . p. lb.	1 11	
Bottoms . . . . .	0 1 3			
Old (Exchange) . . . . .	0 1 0½			
Best selected . . . . .	129 0 0	Foreign . . . . .	23 15 0	
Tough cast . . . . .	126 0 0	To arrive . . . . .	24 0 0	
Tin . . . . .	126 0 0			
South American . . . . .	126 0 0	In sheets . . . . .	29 0 0	
*Bars, Welsh, in London.	9 0 0	English, blocks . . . . .	114 0 0	
*Ditto, to arrive . . . . .	7 15 0	Ditto, Bars (in barrels) . . . . .	115 0 0	
*Nail rods . . . . .	8 10 0	Ditto, Refined . . . . .	118 0 0	
*Stafford, in London . . . . .	9 10 0-10 0 0	Bansa . . . . .	106 0 0-107 0 0	
*Bars, ditto . . . . .	9 10 0-10 0 0	Straits . . . . .	104 0 0-105 0 0	
*Hoops, ditto . . . . .	9 7 6-10 17 6			
*Sheets, single . . . . .	9 10 0-11 15 0	TIN-PLATES.		
Pig, No. 1, in Wales . . . . .	4 15 0-5 15 0	IC Charcoal . . . . .	111 0 11 6	
Refined metal, ditto . . . . .	6 15 0-7 0 0	IX Ditto . . . . .	117 0 11 6	
Bars, common, ditto . . . . .	6 15 0-7 0 0	IX Coke . . . . .	1 4 6-1 7 0	
Ditto, railway, ditto . . . . .	6 10 0 0	IX Ditto . . . . .	112 6-1 13 0	
Ditto, Swedish, in Lond. . . . .	10 0-15 10 0	Canada plates . . . . .	10 15 0 0	
Pig, No. 1, in Clyde . . . . .	3 1 0-3 2 0	In London; 20s. less at the works.		
LEAD.		Patent Yellow Metal Sheath-		
English Pig . . . . .	22 0 6-32 10 0	ing (Muntz's) . . . . .	11½d. 11	
Ditto sheet . . . . .	23 0 6-33 10 0	Wettered's Pat. Met. . . . .	p. wt. 2 2 0	
Ditto lead . . . . .	23 10 0	Stirling's Non-lamina-		
Ditto white . . . . .	27 10 0-28 0 0	ting, or Hardened . . . . .	9 0 0-9 2 0	
Ditto patent sheet . . . . .	28 0 0 0	Surface Rails, p. ton . . . . .		
Spanish, in bond . . . . .	21 0 0-22 0 0	Stirling's Patent Glasg. . . . .	— 5 5 0	
American . . . . .	none.	Toughened Pigs . . . . .		
		Ditto Wales . . . . .	4 0 0-4 5 0	
FOREIGN STEEL.		Indian Charcoal Pigs . . . . .	— 6 10 0	
Swedish, in kegs, p. ton . . . . .	16 0 0-18 10 0	In London . . . . .		
Ditto, in faggots . . . . .	16 10 0-21 0 0	In Liverpool, 10s. per ton less.		
English, Spring . . . . .	22 0 0-24 0 0	At the works, 1s. to 1s. 6d. per box less.		
In Liverpool, 6s. per ton less.				

**REMARKS.**—The demand for metals has been extremely limited, and the state of our market generally is very unsatisfactory. Sellers, to secure orders, in most instances are willing to meet buyers in price rather than allow business to go by them. It will be found, on referring to the above list, that many of our quotations have receded.

**COPPER.**—English is in fair request, especially rolling and melting qualities. Manufactured sheet is not in such good demand, and can be purchased a shade under the fixed value. A few hundred tons of South American is reported as being in course of transit to Liverpool.

**IRON.**—Welsh has not differed in price, nor has the demand improved. The ironmasters in London have announced that a meeting will take place here on the 20th inst., for the purpose of arranging future prices, wages, &c. Staffordshire descriptions have been pressed on the market at very reduced prices, without creating any disposition to operate amongst buyers. Business has been transacted in Scotch pigs at 60s., mixed numbers, cash; 62s., three months prompt. In consequence of the shipments having much decreased last week, holders have pressed sales, which has caused the market to close heavily, prices being quite nominal.

**LEAD.**—The manufacturers have reduced their prices about 10s. per ton. The market continues inactive, and has a declining tendency.

**SPELTER.**—A transaction has taken place at 23½ 10s., but since the price has rallied 5s. per ton; the demand, however, is very languid. Should the present weather last, we shall probably have prices maintained, and, possibly, an advance established, as the stock is by no means large, and no addition can take place by arrivals.

**TIN.**—English is quiet, at former prices. Banca has declined 20s. per ton in warehouse here, and in Amsterdam there are sellers at 64 fl., and even a little under that price might not be refused. Straits of fine soft quality has been sold at 104½, prompt three months; East India Company's conditions, there are still sellers at 104½, cash, fourteen days to one month; and a few buyers at 104½, with usual prompt.

**TIN-PLATES** are quiet, with a slight decline in price.

**STEEL AND QUICKSILVER** are quoted as before. No particular demand for either metal.—BRASS is dull.

**GLASSGOW, FEB. 15.**—Since last report, a more decided move downwards has taken place in our market. The increasing gloom in commercial affairs, smaller shipments of iron, and fears of an interruption of shipments to the Prussian ports, operated to make some large holders desirous to quit, to do which a reduction of price had to be submitted to. A very fair quantity changed hands from 64s. down to 60s., and the market is now steadier at 60s. 3d. buyers, 60s. 6d. sellers. The makers show themselves still not disinclined to sell at market rates, and it is possible that we have not yet seen the lowest. The following are to-day's quotations: No. 1, Gartsherrie, 64s.; No. 1, g.m.b., 61s. 6d.; No. 3, g.m.b., 60s. 3d. Shipments for the week ending Feb. 13:—

Foreign . . . . .	Tons	1855.	1854.
Coastwise . . . . .	Tons	2282	2095
		5096	5347
Total . . . . .		7348	5442

**LIVERPOOL, FEB. 15.**—Great dullness has prevailed in the iron market for some time past, and the demand from abroad for manufactured has been less than usual at this season of the year. In Scotch-Pig Iron, the market during the last few days has manifested a downward tendency, and it closes heavily to-day at 61s., without disposition for business. Other metals unaltered.

**PARIS.**—The prices of iron are nominally maintained, but the amount of business is extremely limited. Pigs for fusion are unchanged, but the stock is almost nil. Sheets are more sought for, and bargains have been made for forward delivery at present quotations. No change in other metals. A new society has just been formed for the production of gas from peat; it is established *en commandite*, but reserves the privilege of being converted into a *societe anonyme*; the council of surveillance contains names of the highest respectability. Amongst the objects of the society are:—The licensing of these gas companies which at present exist to use the patent process; the licensing of series to apply the invention, at a royalty on the saving effected; and the illumination of towns on their own account. M. de la Motte is already illuminated with their gas, and Tours will shortly be so. At St. Dizier, the aspect of the market presents but little variation, the prices being nominally the same, and the demand still limited. With regard to the Belgian markets, the following is extracted from the *Journal de Charleroi*:—"The prices of iron remain much the same as stated in our last; the demand is more and more improving, and notwithstanding the number of hands employed, the *lamineurs* cannot meet it, and are actually obliged to refuse many orders. Pig maintains its price, and as to the manufacturers, they continue fully employed, especially in the construction of machinery, the material for railways. The demand for coal continues active, and a rise is even talked of; and although we do not anticipate any such movement at present, holders positively refuse to accept orders at the present quotations, unless for immediate delivery."

**MINES.**—A few sellers of the heavy priced shares this week have caused this description of stock to be rather more depressed, but there has been a large amount of business doing in other shares, and the market is well supported. Bullers and Bassets are offered without finding buyers, thus making good our remarks a few weeks ago, as to the desirability of subdividing them into 1024 shares. United have advanced from 180s. to 220s.; Trelawny, 32s. to 34s.; West Basset, 28s. to 30s.; North Basset, 17s. 10s. to 18s.; North Trelawny sought after, at 5s. 10s. to 6s.; in Sortridge Consols, a large amount of business has been done, but the market not quite so firm as last week, at 24 17s. 6d. to 3s.; North Roberts have advanced to 18s. 20s.; Alfred Consols, 15s. 2s. 6d. to 16s. 7s. 6d., and flat; Dolcoath, 82s. to 84s.; Trelawny, 3s. 10s.; Keswick, 17s. 2s. 6d.; Tamar Consols, 17s. 10s. to 18s. 15s.; Wheal Charlotte, 11s.—this mine has just paid its first dividend of 10s. per share. Rosewarne have been in great request, at 105s. to 110s., but no sellers are met with; West Consols have been in demand, at prices varying from 200s. to 250s.; Trefusis, 6s. 10s. to 7s.; Wheal Wrey, 4s. 16s. to 5s.—the first dividend of 4s. per share has just been declared at this mine. East Tamar, 12s. 6d.; South Tamar, 6s. 15s. to 7s.; Tintoff, 2s. to 2s. 10s.; Grambler and St. Aubyn, 2s. to 2s. 6d., and in demand; these shares are likely to have a considerable rise before long.

**In the Bullion Market.**—Mexican dollars, 5s. 0½d. per oz. Bar silver containing gold, all gold above 5 grs. in the pound to be paid for, 5s. 13d. per oz. standard. Bar silver without gold, 5s. 13d. per oz. standard. Bar gold, 77s. 9d. per oz. standard. Columbian doubloons, 76s. 3d. per oz. Fine cake silver, 5s. 6½d. per oz.

At Wheal Charlotte meeting, on the 10th inst., the accounts showed:—Mine cost for November, 339s. 7s. 1d.; December, 299s. 1s. 10d.; merchants' bills, 173s. 5s. 6d.; 88s. 7s. 6d.—Balance from end of October, 235s. 17s. 8d.; by sales of copper ore (less 10s. dues and glebe, 68s. 11s. 11d.), 117s. 6s. 6d.—1457s. 7s. 6d.; making profit, 631s. 15s. 7d.—From which a dividend of 10s. per share (512s.) was declared, leaving balance in hand, 119s. 19s. 7d. The statement of assets and liabilities (including sale of ore, Feb. 8, 939s. 13s., and ore on floors, estimated at 600s.) makes a balance, after providing for January wages and bills, in favour of adventurers of 1299s. 11s. 7d. Capt. Gundry's report is among the Mining Correspondence.

At East Wheal Russell meeting, on Tuesday (Mr. Robert Bastow in the chair), the accounts showed a balance in favour of the adventurers of 499s. 10s. 6d. A call of 5s. per share was made. Capt. W. Metcalf reported that Hilteth's shaft was sunk and made good 6 fms. below the 8s. The 55 fm. level, driving east towards Homersham's, was looking very promising; the lode was producing good stones of black and grey ore.

At the Exmouth and Adams United Mines meeting, on the 7th inst. (Mr. T. Hartnell in the chair), the accounts showed—Balance from the last account, 2149s. 11s. 11d.; ore sold, 2214s. 16s. 2d.; interest, 21. 11s. 8d.—4366s. 19s. 9d. Mine cost, Nov., 833s. 6s. 8d.; Dec., 910s. 5s. 1d.; due to Lord Exmouth (1-11th) 1467. 16s. 3d.; due to the proprietors of Wheal Adams (1-14th), 71. 14s. 3d.; merchants' bills, &c., 208s. 13s. 6d.; leaving balance in favour of mine, 2240s. 3s. 6d. The committee of management were re-appointed, with the addition of Messrs. Ware and Sheffield. Capt. James Hampton and N. Fall reported that the 20 fm. level was producing full 1 ton of lead per fm., and rich veins and leaders are constantly running across to the parallel lode to feed them. Many of the pitches have been improved, and the general prospects of the mine were more better. They had been to make the new dressing-floors for the first process at Porter's shaft, but the time for dressing could not be materially increased until they got more water.

At Cubert United Mines meeting, on Monday (Mr. James Ennor in the chair), the accounts showed—By cash received for calls, and forfeited shares and 1115s. 3s. 3d.; silver-lead ore sold, at 14s. per ton, 760s. 1716s. 3s. 3d.—Balance last account, 133s. 1s. 7d.; mine cost and merchants' bills, Oct., Nov., and Dec., 1236s. 13s. 6d.; dues, and balance of interest and discount, 33s. 5s. 4d.; leaving balance in favour of mine, 294s. 4s. 4d. Assets over liabilities, 353s. 19s. 10d. Capt. S. Richards reported that, from present appearances, he was of opinion they would get, in the months from the date of the last sampling, from 40 to 45 tons of good ore; and whatever they might discover and raise for the 65 fm. level, in this time, would be in addition to this quantity. Captain John Prince had also inspected the mines, and his report was considered favourable.

At Cook's Kitchen Mine meeting, on the 7th inst., the accounts showed—Balance from last account, 2167s. 14s. 4d.; mine cost and merchants' bills, June, Nov., 4024s. 9s. 2d.; water rent, boiler, &c., 289s. 4s. 3d.—9481s. 7s. 9d.—Calls received, 2164s. 17s. 6d.; copper ore sold, 339s. 0s. 9d.; black tin sold, 1373s. 14s. 6d. materials, &c., 301. 0s. 8d.; leaving balance against adventurers, 2523s. 14s. 5d. A call of 1s. per share was made. Capt. Charles Thomas, Samuel Davey, and Charles Thomas, jun., reported that the stock of tin on the mine to the end of December was 27 tons. The net value, clear of dressing, was about 1400s. They estimated the raising of tin for the next three months at 10 tons per month, which, with the copper ore, they expected would nearly meet the working cost.

At Dolifwynog Mining Company meeting, on the 3d inst., the accounts showed—Calls received, 3267s. 10s.—Cash payment to September, 1854, 1161s. 0s. 1d.; mine cost, September to December, 472s. 6s. 4d.; merchants' bills, 1161s. 0s. 1d.; 89s. 11s. 9d.; leaving balance at bankers, 675s. 11s. 11d. Capt. John Davies reported that Price's shaft had been sunk 15 fms., and from surface to the bottom the lode was highly mineralised, and continued to produce good stones of silver-lead, yielding from assays about 50 ounces of silver to the ton. The wheel and other machinery had been safely landed at Barmouth; the axle weighed 11 tons, and the centres 4 tons each; it was considered one of the finest wheels ever made in Cornwall, and would, when set in motion, give a sufficiently powerful drive and every purpose. Capt. Davies then continued:—"Having given you a brief outline of our progress, prospects, &c., allow me to remind you, that hitherto your very legitimate mining has been conducted in this county, and, therefore, the mineral resources of Merioneth are very imperfectly known; but, on carefully comparing the lodes and cross-courses of this district, and the general effects produced, with the mineral deposits, &c., of sundry other mining districts, I find a great similarity, especially when we get regular strata, as in this mine and at Dolifwynog; but there are certain districts in this county where there are exceptions to the general rule, where mines cannot be profitably worked—viz., where porphyry veins, or veins of stone, or vail. From the extraordinary good indications seen in the mine, and from the deposits of lead, but also from the nature and regularity of the lode, I am very sanguine, and am almost sure of success."

At Great Wheal Alfred meeting, on the 6th inst., the accounts showed—Balance last account, 1562s. 7s. 11d.; labour cost, 1517s. 4s. 2d.; doctor and dial, 16s. 1s. 1d.; merchants' bills, 1162s. 9s. 10d.—4238s. 3s. 3d.—Calls received, 1561s. 17s. 6d.; copper ore sold (deducting dues, 1-30th, 47s. 8s. 7d.), 1375s. 10s. 6d.; leaving balance against mine, 1321s. 0s. 6d. A call of 1s. 5d. was made. Captains T. Richards, John Stevens, W. Beaglehole, and W. Arthur, reported that the future raising of copper ore would in some measure depend upon holding Copper-house shaft to 145 fm. level, when the conveniences for dispatching the ore and attle would be considerably increased.

At Wheal Gill meeting, on Monday (Mr. John Stephens in the chair), the accounts showed—Balance last account, 376s. 10s. 7d.; mine cost, Dec. and Jan., 384s. 2s. 7d.; merchants' bills, 225s. 11s. 11d.; sundries, 8s. 9d.—991s. 17s. 10d. Calls received, 448s. 18s. 4d.—leaving balance against the mine, 544s. 10s. 10d. A call of 6s. 8d. per share was made. Capt. Wm. Taylor reported that they had sunk 15 tons of lead ore, which would be sold in a few days. They had more at surface, but the severity of the weather had prevented them from getting it ready for market.

At the Tamar Silver-Lead Mining Company meeting, on Tuesday (Mr. G. B. Carr in the chair), the statement of accounts showed the assets over liabilities to be upwards of 2500s. The late directors having resigned, Messrs. Carr, Haden, Dunsford, Buris, and Cookney were, at the recommendation of the shareholders, appointed the directors. The proceedings, which ended with a cordial vote of thanks to the chairman, are fully reported in another column.

At the Devon Barris Barra Mining Company meeting, on the 1st inst., the accounts showed—Balance last account, 77s. 0s. 8d.; calls received, 2888s. 10s. 8d.—Mine cost, Sept. to Dec., 458s. 14s. 7d.; balance of steam-engine, 3984s. 10s. 8d.; merchants' bills, 685s. 1s. 5d.; stationery, printing, &c., 9s. 17s. 2d.; 956s. 10s. 8d.; leaving balance against mine, 1585s. 10s. 8d. The existing liabilities, amounting to 1175s., a call of 10s. per share was made. Mr. Wolferston reported favourably on the prospects of the mine, and concluded by observing—"The stratum is killed of the best kind for the production of copper ore; and, looking at the numerous cross-courses that intersect the lode, I cannot but think that there is now a prospect of success." The election of the committee of management terminated the proceedings.

At Trenow Consols Copper and Tin Mining Company meeting, on the 31st Jan., the accounts showed—Balance from last account, 1790s. 13s. 11d.; m. cost, Oct., 409s. 13s. 2d.; Nov., 544s. 2s. 10d.; lease, 28s. 2d.; balance for new engine, 500s.; merchants' bills, 326s. 12s



In the Press.

# THE WAR, AND A REVISION OF THE MAP OF EUROPE.

By JAMES SMITH, Esq.

Also, will be shortly ready, by the same Author,  
AN EPITOME OF BLACKSTONE'S COMMENTARIES; with Notes on the Duties of Solicitors.

London: Published at the *Mining Journal* office, 26, Fleet-street, London.

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**STAVELEY COLLIERIES, IN THE COUNTY OF DERBY.**  
 WANTED, at these collieries, a RESIDENT UNDER-VIEWER. The person to be employed must have a thorough practical knowledge of coal mining in all its branches (by "long wall" and "narrow work"), of shaft sinking, and of ventilation. He must also have unexceptionable testimonials as to character.—Application may be made to Mr. RICHARD RABLOW, Staveley Works, near Chesterfield; or to Mr. J. JO. T. WOODHOUSE, colliery viewer, Overseal, near Ashby-de-la-Zouch.  
 Staveley Works, near Chesterfield, Feb. 14, 1855.

**LIBERTY MINING COMPANY.**—SUBSCRIBERS TO THE NEW SHARES are reminded that the SECOND INSTALLMENT will be PAYABLE to the secretary on Tuesday, the 20th inst., and that in default the first instalment will be forfeited.  
 By order, H. H. ROOD, Sec.  
 Company's Offices, 62, Moorgate-street, Feb. 15, 1855.

**GOLD AND SILVER MINING.**—Mr. W. EATHORNE GILL is prepared to UNDERTAKE the MANAGEMENT OF GOLD or SILVER MINES; and to SEPARATE either METAL from its MATRIX, in the most INEXPENSIVE and EFFICIENT MANNER, without the labour and other cost of calcining.  
 Mr. W. E. GILL is prepared to open negotiations with capitalists for a well recognised, and the admitted richest mine in California. Certificates of richness, &c., John Arthur Phillips, Esq., and other professional gentlemen of reputation.  
 Reference in town to WILLIAM SMITH, Esq., C.E., 10, Salisbury-street, Adelphi, Totnes, Feb. 14, 1855.

**GOLD COMPANIES, and others interested in CRUSHING QUARTZ and MINERALS,** should INSPECT the NEW STEAM STAMPING MACHINERY, made for Mr. EVAN HOPKINS (before shipment), at J. WALKER'S, 17, Cowper-street, City-road.  
 Also, his Double-acting Presses, for pressing Hay, Wool, Hops, &c.; large Rectors for drying Silver Ores; Pumps, &c.

**BOTALLACK TIN AND COPPER MINES.**—Mr. W. CHARLES has SHARES FOR SALE in the above important MINES, which are now paying £10 per share every two months. W. CHARLES has SHARES FOR SALE also in the following:—viz., Great Crinnis, West Bar Conso, East Caradon, Caylan, and Keswick, Langford and Baring, Albion Clay, Wrysgan Slate, North Trevelyan, and others. Mr. W. CHARLES is a BUYER in West Crinnis, Marke Valley, Union Tin, and others.—27, Austinfriars, Feb. 10, 1855.

**CIAPT. THOMAS DUNN, of TAVISTOCK,** undertakes to INSPECT, REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND, IRELAND, SCOTLAND, or WALES. No objection to take the management of any mine or mines in the neighbourhood of Tavistock.

**CIAPT. J. COLLOM, of DEVON and CORNWALL,** being about to resign his engagements as agent of the Tees Side Mines, begs to inform his friends that he purposes to VISIT all the PRINCIPAL MINING DISTRICTS of GREAT BRITAIN and IRELAND, for the purpose of making a general MINERAL and MACHINE SURVEY. He would undertake to inspect and report on, survey, and map, any mining property in England, Ireland, Scotland, or Wales, on application.—Mining Office, Market-square, Alston, Cumberland.

**M. R. N. ENNOR, of WIVELISCOMBE, SOMERSET,** begs to inform his mining friends that he has PREPARED a LIST OF MINES, which he considers are FAIR SPECULATIONS, accompanied with ADVICE, and which he intends furnishing parties desirous with for a moderate emolument.—For particulars, address as above.

**MINING INVESTMENT.**—T. FULLER AND CO., 51, THREAD-NEEDLE-STREET, LONDON, continue to ADVISE CAPITALISTS upon all description of MINING PROPERTY; and beg respectfully to call attention to the present favourable opportunity of PURCHASING in both BRITISH and FOREIGN DIVIDEND and PROGRESSIVE MINES, a careful selection of which cannot fail to remunerate all who invest, many of them paying profits from 15 to 20 per cent.  
 T. FULLER and Co., being in daily communication with agents of practical experience of the principal mines of Devon, Cornwall, and Wales, are in a position to furnish every information, either personally or by letter, and all instructions promptly attended to. Every kind of business transacted upon Stock Exchange principles.  
 N.B. Office hours from Ten till Five o'clock.

**NOTICE TO INVENTORS AND PATENTEES.**—THE OFFICES for PROCURING PATENTS are REMOVED to No. 32, ESSEX STREET, STRAND, LONDON, where all information (British and foreign) may be obtained gratis.—AVERY, BELLFORD, GARDINER, and Co., patent agents and negotiators.

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**PRODUCTION OF GOLD IN CALIFORNIA.**

The following estimate of the total amount of gold hitherto produced in California, from the period of its first discovery, probably approximates closer to the truth than any other estimate hitherto made:—

Previous to 1851, assumed from statistics of the Philadelphia Mint .....	\$63,915,376
Manifested by steamers, 1851 .....	34,492,624
ditto ditto 1852 .....	45,559,177
ditto ditto 1853 .....	56,360,569
ditto ditto 1854 .....	51,292,595
Deposited for coinage at Branch Mint, San Francisco, previous to Nov. 30 .....	5,122,535
deposited for coinage for month of December, 1854, about .....	162,805
Deposited for bars, November and December .....	1,808,357
Probable amount in hands of passengers for 4 years, at \$10,000,000 a year .....	40,000,000
Total product, probably .....	\$388,241,538

In the foregoing estimate, no account is taken of the amount of uncoined gold in the hands of miners, or lying on general deposit with various express agents and bankers. It is the opinion of those who have made enquiries on the subject, that the amount thus retained is fully up to three millions of dollars. Nor is the amount shipped by sailing vessels included—an omission caused by the inability to ascertain the proportion which must bear to coin in such shipments.

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**THE COAL TRADE.**—There were only 10 ships offered at the Coal Exchange yesterday, which sold at from 17s. to 29s., according to quality. The navigation of the river continues greatly impeded, if not almost entirely stopped, by the ice.

**CAST-STEEL ORDNANCE.**—The metal ordinarily employed in the casting of cannon not having been found suitable for the Lancaster guns, Messrs. Krupp, of the ironworks of Essen, in Rhenish Prussia, have made a Lancaster gun of east-steel, and sent it to Woolwich, to have it experimented on. Before being bored, it weighed about 7000 lbs.

**THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE** have accepted the invitation of the Town Council, University, the Philosophical and other societies, requesting them to hold their annual meeting in Glasgow in September next. The officers appointed by the Council of the Association for the meeting are:—President: His Grace the Duke of Argyll.—Vice-Presidents: Principal Macfarlan, D.D.; Sir W. Jardine, Bart.; Prof. Thomas Graham, F.R.S.; Prof. William Thompson, M.A., F.R.S.E.; Sir Charles Lyell, F.R.S.; James Smith, Esq., of Jordanhill, F.R.S.; Walter Crum, Esq., F.R.S.—Local Treasurer: Prof. Ramsay.—Local Secretaries: J. Strang, Esq., L.L.D.; Prof. T. Anderson, M.D.; W. Gourlie, Esq.

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**LEAD ORES.**

Sold on the 10th February.				
Mines.	Tons.	Price per ton.		Purchasers.
South Tamar .....	100	£19 17 6	.....	Sim's, Willems, & Co.
Sold on the Mine.				
Wheal Wrey Consols .....	47	£17 2 6	.....	Newton, Keates, & Co.

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**BLACK TIN.**

Sold on the 17th January.				
Mines.	Tons c. q. lb.	Price per ton.	Amount.	Purchasers.
Boscom .....	0 14 2 8	£29 0 0	£ 50 5 5	Daubers.
ditto .....	0 7 0 10	58 0 0	20 14 3	ditto
Sold on the 31st January and 9th February.				
Boscom .....	8 2 0 0	£26 15 0	£540 15 6	Daubers.
ditto .....	7 17 14	64 5 0	365 11 3	ditto

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**COPPER ORES.**

**NO SALE on Thursday last, 15th February.**  
 Copper ores for sale on Thursday next, at the Red Lion Hotel, Truro.—Miles and parcels.—Devon Great Consols 2921—West Caradon 335—Holmbush 375—Marke Valley 320—Hington Down 250—Wheal Arthur 235—Bedford United Mines 218—Great Sheba Consols 173—Alfred Consols 190—Wheal Friendship 108—Kelly Bray 106—Wheal Russell 55—Wheal Crebor 79—North Walsh Robert 73—South Bedford Consols 60—Scordridge Consols 60—Boscom United Mines 50—Wheal Carpenter 41—Hawkmoor 40—Wheal Zion 34—Pentice Glaze 24—Copper Hill 23.—Total, 4508 tons.

**WELSH POTASH MINING COMPANY.**—The letter of "A Shareholder" (Manchester) can only be inserted as an advertisement. We have already more than once directed attention to the matters referred to; and the shareholders should now interest themselves in ascertaining the true position of their affairs. The publication of mere anonymous communications can effect no real good. An independent committee of enquiry should be formed.

**TAPPING'S PRIZE EXAMINER ON THE COST-BOOK SYSTEM,** enlarged and augmented, with Notes and an Appendix, can be had at the *Mining Journal* office, 26, Fleet-street.—Price 5s.



### Notices to Correspondents.

\* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

**Horse-power Machines.**—Sir: In the Exhibition of 1851, in the American department, there was a machine on the principle of a treadmill, adapted for horses; and I have since read that similar ones are in use in America. Can any of your correspondents inform me if there are any in use in England, if they are found to answer, and where they are manufactured? I think they would be very useful in collieries, for inclined planes, &c., as they would prevent the necessity of such large and expensive excavations as are necessary for applying horse-power in the ordinary way. G. H. L.

**Sir**—I should feel obliged by Mr. Ennor's informing me what value he attaches to the lights which are seen at times in the night on the coast of certain localities, as a datum for their productivity, or otherwise, as well as feel very thankful to him for his information. I beg to thank this gentleman for the valuable letters he has at various times published through the Journal. It appears not unlikely the public will be better customers to miners on seeing the principles on which the latter act. Hints from all agents, explaining, must have this tendency. A. KINROSS. Feb. 15.

**G. B. C. (Cornhill).**—The directors intend dispatching coils to the works early in May; the freight, owing to the war, will be much higher than that usually paid, though not at a more enhanced rate than last year.

**Mr. Guedalla and the Australian Consols.**—Sir: In your Journal of Feb. 3 there appeared a letter from "A Shareholder in the Australian Consols Company," making a very respectful enquiry of Mr. Guedalla with reference to the state of matters in connection with the same. Now, I do think Mr. Guedalla is bound to take some notice of such an enquiry, coming as it does from a holder, who was evidently influenced in his investments by the statements of Mr. Guedalla and his committee. I can substantiate the information conveyed in the letter of "R. W."—viz., that we were informed by Mr. Guedalla's committee that we had a freehold landed property in Australia which was worth at least 200,000l. I was present at the meeting convened at Mr. Lindo's office by the committee, and can, therefore, vouch for the correctness of the statement. I did not follow "R. W.'s" example—viz., increase my holding—but I firmly retained what I had, and I did so entirely on account of this statement of Mr. Guedalla's. This gentleman, it appears, can find time to fight battles on behalf of the Westminster Improvement bondholders, and others; but he evidently does not find it convenient to answer questions from parties who have been induced to place faith in him. Mr. Guedalla's interference in the affairs of the Australian Consols was perfectly gratuitous, and by thus seeking notoriety, he lays himself open to enquiries, which I think he is bound to answer.—C. J. E. Old Broad-street, Feb. 13.

**Monarch Gold Mining Company.**—Sir: Can any of your readers inform me if this company is now in existence, or from whence we can receive any information as to the success or not of the undertaking?—A. CONSTANT. Dudley Feb. 13.

**"One who hates Law, and what some call Equity."**—The company intend to avoid all Chancery proceedings. The sum of 7s. 6d. per share has been agreed to be returned to all those applying for it; and, with but few exceptions, the majority of the scrip-holders have received the amount. It is better that so much should be obtained, than sustain a total loss. Nearly all these associations were ill-constituted from the commencement.

**"J. S. B." (Cornhill).**—The meeting will be probably adjourned, as no advice as to a working result have been received from the superintendent.

**Improvement of Cannon Balls.**—Sir: Referring to the enquiry, if it were possible to incrust iron cannon balls with a coating of lead or zinc, in order that the abrasion on the piece itself might be diminished, I would suggest that cannon balls, by the electro process, can, with the greatest expedition and facility, be coated with copper, lead, zinc, &c. The cost would be trifling, and the incrustation be complete, even, and without seam. The thickness of the coating might be regulated to a nicety. Almost any alloy of metals might be used, were such found desirable; 24 hours' immersion would be sufficient, and the number of cannon balls that might be turned out complete in that time would to a certain extent (allowing always for the increased electric force necessary) depend upon the capacity of the vessel in which they were to be immersed, and might vary from 100 to 1000.—R. H. H. Army and Navy Club, Feb. 14.

**"J. H." (Colne).**—The offices of the Australian Freehold Gold Mining Company are in Nicholas-lane, corner of Lombard-street. The secretary is Mr. W. Pulsford.

**Why has Gold Mining in Wales Failed?**—Sir: I beg to state, that the failure was not from want of gold, but want of practical men to modify the best methods to extract the precious metal out of the matrix, &c. It is very well known that gold has been discovered in many places in the neighbourhood of Dolgelly, even in the alluvial soil, and continuing, so far as worked upon, down even from 15 to 30 fms. in depth. Many grants contain an immense number of rich mineral veins, producing gold; the gold veins are very numerous, and wherever they are found produce live of gold they are accompanied by rich deposits of lead, blende, iron pyrites, quartz, kyllas, slate, clay-slate, &c. It is said that the late extractors were rather too much in fever-heat to gain the victory respecting gold; yet, for all that, they ought not to dispraise nor doom the country by their failure, as a great deal might be said in favour of gold. I hope Mr. C. Low, at Caegwian Mine, will succeed, and be able by his produce to out of the disputes. I was the first to find visible gold specimens.—KENNICK ROBERTS: Dolgelly, Feb. 16.

**Why has Gold Mining in Wales Failed?**—Mr. Hattie's communication has been received, but owing to pressure of space, that, as well as some remarks on the subject, we are compelled to defer until our next publication.

**Lake Batiuret.**—Sir: The case of Woods v. Bell is to be carried by the latter to the House of Lords, where, no doubt, Bell will again lose his case. Such are the means employed by ill-gotten wealth to gain time, and endeavour to tire out honest plaintiffs. In the Vice-Chancellor Wood's Court everything is going on favourably for us; and the case Burnett v. Bagshaw goes on swimmingly.—H. GUEDELLA: Feb. 14.

**Ave Maria Committee.**—Sir: Mr. Parker will greatly oblige me by saying when himself and colleagues intend to publish a report, or convene a meeting of the scrip-holders. All manner of reports are in circulation on account of the ten weeks' delay beyond the time contemplated; and, really, I take credit to myself for forbearance, under the circumstances. Out of doors but one conclusion is arrived at, which I shall not put at present in print, but wait till this challenge is taken up, and the mystery solved. Mr. Capper, one of the directors, has lately died.—H. GUEDELLA: Feb. 15.

**British Australian Gold.**—Sir: "Porima" is informed that, owing to severe indisposition, he was the first to inform me of Mr. Dyer's advice, as the paragraph in the Mining Journal escaped my notice; in which there is nothing very extraordinary, considering the large number of journals and newspapers I peruse daily. Both British and foreign, connected with science, literature, and the fine arts. Through his writing anonymously, I was led to fix the authorship on a relative of his; if it is not the case, I apologise, and protest against the practice of malicious scribbles, who continue to attack me, without giving their names. I shall not even in future condescend to answer such "squires," but treat them with profound contempt. It is questionable, however, whether they ought ever to have been admitted into your Journal—being got up generally by some director's "out," to call off my attention from the company, and cripple my labours, by endeavouring to engage me in controversial disputes, and thus, by counter-irritation, weaken my other efforts. Mr. Michel can bear testimony that I have investigated his plan for the future of this company most thoroughly, and have given much time to it. I have come to the conclusion that it ought to be tried, without loss of time.—H. GUEDELLA: Feb. 15.

**"T. C. S." (Baker-street).**—The directors are liable, as it was upon the faith of their prospectus that the shares were taken. We have always recommended that those purchasing shares, where a large number is stated, with the capital paid, should, before concluding the negotiation, enquire how much of the capital has been subscribed; if this were done, it would tend much to check the injurious system which now prevails. Many of those holding shares, as recent disclosures have shown, are not aware of their liabilities until the speculation in which they are embarked is wound up.

**"W. C. D." (Westbourne-grove).**—When ores are so thoroughly impregnated with clay, we should imagine it would be more judicious, after they were crushed, that they should be "budded;" in the case in point, "jigging" would not be available. The offices of the Heavly-Yern Slate Quarry are at 3, Whitehall-place.

**Poltimore Mining Company.**—Sir: On looking over some late numbers of your Journal, my attention was attracted to a letter from a "Recent Shareholder in the Poltimore Mining Company." I should recommend a "Recent Shareholder" to re-read the report to which he alludes; he will find the reports have not cost the public anything like four or five thousand pounds, or half that sum, and that those who are likely to receive the benefit of the clearing the mine of the old committee, and that, when they found there was still a remnant of the capital left, they devoted it, not to useless and expensive litigation, but to the development of the mine in its legitimate produce. From information I have lately received from the neighbourhood (not through any official connection with the mine), the promises made in the reports of the captains and surveyors are likely to be realised, and that shortly. I do not see any ground whatever for the grave suspicions of integrity your correspondent seems so much to dread, the present committee containing a majority of fresh names, and of men, too, of experience and well-known business habits. To my view, it was necessary to retain some of the old committee, to facilitate explanations of the past and further proceedings. The present committee give good evidence of their determination, by curtailing the expenses of the staff and management to the lowest point consistent with due efficiency, and when the "chickens do out," I have no doubt they will be properly matured.—AN ORIGINAL SHAREHOLDER, AND ONE WHO HAS WELL CONSIDERED THE REPORTS AND PROSPECTS OF THE POLTIMORE: Leeds, Feb. 9.

**"Miner" (Camborne).**—Siderochalcolite contains protoxide of iron, silica, alumina, and water; its streak is green, and lustrous brilliant; it becomes black and magnetic from exposure to heat; before the blowpipe it is readily fusible into a black magnetic glass, and is soluble in acids. It is found at Congonhas do Campo, in the Brazil. We have particularly to request that subscribers and others, in paying accounts, will send cheques or post-office orders, in preference to postage-stamps.

**NOTICE TO SUBSCRIBERS.**—The Journal may be obtained of any bookseller or news-vendor in the kingdom, price 6d. weekly, or 14. 6s. per annum. Although we would recommend the subscription to be made by this means, if there is any difficulty in obtaining it through an agent, we supply it direct from the office, on receipt of a post-office order in favour of Wm. Salmon Mansell, as acting for the proprietors. As regards foreign subscribers, it is necessary that the amount for postage payable in England should be added, and the remittance made by draft on demand on a house in London. We give the amounts to be added for some of the principal countries, for their guidance:—Italy and Portugal, 3s. 3d.; Holland, 4s. 4d.; other parts of Europe require no postage. As, however, the postage payable on receipt of newspapers sent through France is exorbitant, when transmitted from our office, we would advise subscribers in those parts to apply at the post-office for their respective districts, by which means they will be supplied on payment, in advance, of the subscription, together with a small per-centage thereon (usually 10 per cent.), which covers the cost of transmission. In France, the amount payable on receipt is 4 sents. The postage to the United States, British North America, Australia, and New Zealand, is 4s. 4d.; Foreign West Indies, California, and Mexico, 3s. 3d.; Chili, 17s. 4d. (other parts of South America free). All foreign subscriptions must be paid in advance, to ensure the regular transmission of the Journal; but if the subscriber is desirous of discontinuing his subscription, it is absolutely necessary to give notice of the same, otherwise the subscription continues.

**HINTS TO ENGLISH QUARTZ CRUSHERS AND IRONMASTERS.**—Sir: The white quartz crushing companies may render their product available by teaching our ironmasters how to make good and substantial hearths for their furnaces, and lining for their cupolas, with the pulverised quartz, instead of the expensive gritstone, or the defective brick hearths, as now too commonly used for such purposes. Pure quartz will require a small proportion of felspar mixed with it, and should be rammed down almost dry, in the same manner as we make cupels: by careful drying and slight glazing, it will become as hard and compact as a solid stone.—EVAN HOPKINS: Thurlow-square, Feb. 16.

**GOLD MINING IN WALES.**—Sir: Will your correspondent, "Salopian Gnome," inform us what information he is in want of to render gold mining productive? I thought your Journal had already supplied sufficient information on the character and productive qualities of auriferous rocks to select those worth working, and also the most simple and effective mode of extraction by which we are enabled to make profits from stuff producing only 1/2 oz. per ton. Such questions do not belong to the Geological Society, but rather to engineers and practical chemists, who may thoroughly understand the subject, practically and scientifically.—EVAN HOPKINS.

**DHURDIE MINE, IRELAND.**—Sir: Can some of your readers give a shareholder any information as to the "present standing of this company?" Also, the distance from "East Dhurde" to West Dhurde, and when do they expect to ship a cargo of ore from the former? Any information will be thankfully received.—ONE INTERESTED.

**GOLD MINING IN NORTH WALES.**—Sir: The Caegwian Company seem to be on the right track in adopting the theory of Mr. Charles Low, as appears from the following statement elicited from Mr. J. A. Phillips, at the late general meeting of the Quartz Rock Mariposa Gold Mining Company:—"For some time," says Mr. Phillips, "they have been in the habit of working in California raw ore, but had now found the great advantage of first calcining them." I should also like to see some of the eminent men throw a little light on this subject, through the columns of your Journal, the acknowledged medium of discussion on scientific matters; but this confirmatory evidence of the value of calcination must be gratifying to those interested in the Caegwian Company, who, by-the-by, deserve the fullest success, as well as commendation, for the spirited way in which they have tackled the question, in spite of the dispiriting influences of the spring of 1854.—CAMBRIA: Swansea, Feb. 16.

**MELBOURNE GOLD AND GENERAL MINING COMPANY.**—Sir: In answer to Mr. Lenton's very courteous enquiry, all the information I can give him consists of the fact that I was appointed consulting engineer; but my tenure of office was of very short duration, for at the first interview I had with the directors, I believe I suggested that the office of engineer could not be honestly undertaken without a previous residence or visit to Australia. From this period my engagements drew me into other mining matters, and I had lost sight of the company, until your correspondent's letter called my attention to it.—ADAM MURRAY: Feb. 15.

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## THE MINING JOURNAL

### Railway and Commercial Gazette.

LONDON, FEBRUARY 17, 1855.

The bill introduced into the House of Commons, prepared by Mr. JOHN FITZGERALD, Mr. NAPIER, and Mr. FRANCIS, for assimilating the Poor Law taxation on mines in Ireland with that in England, has been printed. It is styled "A Bill for the further encouragement of the Working of Mines in Ireland," but we would much prefer that its title more pointedly referred to the object—namely, to place the mines, in this respect at least, on a par with those in Great Britain. There is, in truth, a misconception in its terms, which we would wish to see removed, for many persons who are indisposed to adopt legislative interference, as a means of promoting or encouraging any branch of national industry, would at once concede the principle that Ireland is entitled at least to equal justice. The bill, as prepared, shortly recites, in the first instance, that by an Act passed in the first and second years of the reign of her present MAJESTY, c. 66, entitled "An Act for the more effectual Relief of the Destitute Poor in Ireland," it was, amongst other things enacted "that opened mines should be rateable hereditaments for the relief of the poor." It then states that by an Act passed in England in the 43d year of QUEEN ELIZABETH, entitled "An Act for the Relief of the Poor," coal mines only were made liable to be rated for the relief of the poor in England. It then declares that it is expedient that the law in Ireland should be assimilated to the law as it at present stands in England, and that further encouragement should be given for the working of mines in Ireland. It then proceeds to enact, that so much of the Act passed in the first and second years of the reign of her present MAJESTY as relates to mines, save and except coal mines, shall be, and the same is thereby repeated, and that from and after the passing of the present bill no mines in Ireland, save and except coal mines, shall be rateable for the relief of the destitute poor in Ireland. A proviso is, however, then introduced, that nothing therein contained shall be taken to affect any proceeding heretofore taken upon any action brought under the Poor Law Act, prior to the commencement of the present Act.

Our objection to the title of the present Act is still further strengthened by the introduction of the words we have printed above in italics, indicative of its object, for its enactment is confined to the mere assimilation of the law in this particular instance, and it does not propose to afford any further encouragement to the working of mines in Ireland. We could perfectly well understand its present frame, if it was intended to relieve coal mines in Ireland from all Poor Law taxation, and it would be no great stretch of liberality, and might, perhaps, prove sound policy, to introduce such a provision. The coal fields in Ireland are so limited in proportion to those of Great Britain, as to bear no comparison whatever either in extent, value, or production; and have, therefore, been wholly unable at any period to enter into competition, either for domestic or manufacturing purposes, with them.

Ireland has been, consequently, driven at all times to import the greater portion of her coals from this country; this importation is every year increasing, for she also, at present, imports largely for her gasworks, and for the manufacture of coke for her railways. Her inability to compete with England was sensibly felt by her native Legislature, and Acts are on the statute-book of the Irish Parliament, conferring bounties on the consumption of Irish coal. Even these enactments were dead letters when the bounty system was in favour, and any attempt to revive them would be scouted at the present day, as opposed to the principles of free trade and of modern economic philosophy. When, however, we reflect that the production of coal in Great Britain during the last year amounted to 54,500,000 tons, according to the recent authorities of Messrs. MACKWORTH and DICKINSON; and when we believe we can with safety assert, that the whole production in Ireland did not amount during the same period to 100,000 tons, are we not justified in assuming that the example of the English Poor Law ought not to be followed, even in this instance, and that the coal mines of Ireland ought not to be crippled by any taxation whatever? A provision, releasing the very limited coal mines of Ireland from contributing to the poor-rates, would, perhaps, tend to stimulate enterprise in that important branch of our national resources, by conferring employment, and circulating money in the shape of wages; it would operate to relieve the unions, by supplying a cheaper fuel; it would add to the comforts of the people, and thereby sustain, to some extent, the preamble, by affording some slight encouragement to the working of mines in Ireland.

To the simple purview of the proposed measure, it is difficult to conceive how any reasonable objection can be raised; and still Sir JOHN YOUNG, the Secretary for Ireland, seemed publicly to intimate his dissent. We feel that it would have been far easier to prevent the introduction of an obnoxious clause in the first instance than now to procure its repeal; and if the Irish members had either known or done their duty when the Irish Poor Law Bill was passed, that country would have been most unquestionably placed on an equal footing with Great Britain. There is not a single equitable maxim more firmly established, than that time cannot

sanctify a wrong; and if the measure creating the impost was unjust in its inception, the injustice still remains, and ought to be removed. By the Legislative Union, Ireland is entitled in every respect to claim equal laws and privileges with the sister island; on what principle, therefore, can an exception in respect of her mineral productions be sustained or justified? Since the introduction of the Poor Law system, Ireland has undergone all mutations of "untried being." She has at length passed the transitional state; and is now, under a proprietary in a great measure new, and under prospects entirely so, beginning to revive: honour, justice, and policy, therefore, demand at least what this measure contemplates—an equalisation with Great Britain of the burdens affecting her mineral, one of the most important sources of her national wealth.

A remarkable case has occurred in Scotland, in the Sheriff's Court, Ardee, in reference to the liability of coal and ironmasters to answer in damages to parties injured, for not having adopted the necessary precautions against an explosion of fire-damp. The case was, in the first instance, tried before Mr. Sheriff TANNENT, in an action brought by JAMES BROWN, an ironstone miner, against his late employers, Messrs. MERRY and CUNNINGHAM, ironmasters at Cambro, and he sought 200l. damages, in consequence of his having been severely injured in his person on or about the 17th of October, 1853, from an explosion of fire-damp, which took place in No. 7 ironstone pit, at or near Cambro, belonging to the defendants, whose workman the plaintiff then was. The plaintiff further alleged that, while the plaintiff was proceeding on the morning of that day along an underground heading road in the pit, towards the face to begin his work, he was, by force of the explosion, which was occasioned by the want of a proper air-course, or by the gross negligence and indifference of the defendants, or of their managers or others for whom they are responsible, in not ventilating the pit, and taking the proper precautions against the explosion of fire-damp therein, thrown a long way back the heading road, and thereby got his right arm broken at the elbow-joint, and his body otherwise burnt, bruised, and injured, in some respects permanently. By the defendants' pleading, the averments, as stated, were denied, and the explosion, if it occurred, was attributed to the fault of the plaintiff and his fellow-workmen proceeding to their working places in the pit on that morning, before those places had been examined by the fireman appointed for that purpose. It was further averred by the defendants that, under such circumstances, the plaintiff and the other workmen acted on their own responsibility, and contrary to the instructions of the defendants. After hearing the evidence, and the arguments, the Court found that the plaintiff was injured by the explosion in the manner alleged by him, and that the result of the injury he sustained was, that his right arm was permanently disabled, so as to prevent him from following his employment of a miner, or any other employment requiring the free use of that arm. It was also further found, as proved, that the explosion was attributable to culpable negligence on the part of the defendants, or of those for whom they were responsible; that they were liable to pay to the plaintiff, as reparation, a sum of 50l. sterling, and that he was also entitled to his expenses. In the written judgment of the Court, it was stated that the plaintiff's claim for damages was sought to be sustained on two grounds.—First, that the pit in question had not been properly ventilated; and, secondly, that it had not been properly examined for fire-damp on the morning of the accident, before the plaintiff was allowed to descend. With regard to the first ground, it did not seem proved that the general ventilation of the pit was defective; and for a newly-opened pit, where the workings were not extensive, the means adopted for ventilation appeared to have been sufficient, although larger workings might have required a more effective system. It also appeared that immediately after the accident the defendants caused a trap-door to be placed on the main heading road, and a cube to be erected, and the inference sought to be drawn from this on the part of the plaintiff was, that these measures were adopted in consequence of the accident, and to remedy existing defects in the ventilation. It was, however, proved that the trap-door and cube had been previously resolved on, not as being necessary in the existing state of the workings, but to meet their further extension. It was not improbable that the accident may have caused them to be more promptly proceeded with; but the Court could not consider the use of measures of additional precaution to prevent a recurrence of an accident, as a confession that there was something previously defective, which was the cause of its having taken place. With respect to the second ground on which damages were sought, it appeared that there was a part of the workings where a dyke of firestone crossed the main heading road, where it was well known there was danger of fire-damp accumulating. Until about ten days before the accident the heading had been wrought double shifted, miners working during the day, and brushers at night; but for ten days preceding the accident there had not been any working at the heading. The accident took place early on Monday morning, the pit having stood without any person being in it from 4 or 5 o'clock on the previous Saturday; and when the men went down, the heading seemed to have been full of inflammable gas as far down the main heading road as where the dyke crossed it. The flame was kindled from the lamp of a miner, whose place was next the dyke; the explosion met the plaintiff as he was coming along the heading road to his place.

It did not appear that there was any regular fireman in the pit; nor had there been any regular inspection of the mine for fire-damp, nor any rule restricting the men from descending until it had been ascertained to be safe. A Davy-lamp was placed in the main heading road, that the men might inspect their places if they pleased; and this, with occasional inspections by the roadmen, were the only precautions against fire that were adopted. How often the heading had been inspected in the interval when no working was going on did not appear, but it was clear that it was not inspected on the morning of the accident, and that it was then filled with explosive gas. On this state of facts, there could be no doubt but that there was culpable negligence on the part of the proprietors, in not having had the pit inspected before the men went down to their work; that they had thus failed to fulfil the obligation imposed by law on them, to make due provision for the safety of their workmen; and that they must, therefore, be held responsible for the consequences.

Two grounds of defence require shortly to be noticed. It was said that NICHOLAS NELSON, whose lamp had kindled the explosion, was at the time in a place where he ought not to have been, and that he was thus not engaged in the service of his masters; and it was contended, on the authority of MARSHALL v. THE OMAHA IRON COMPANY, that no liability attached to them from the consequences of his unwarranted act. The state of the facts, as they appeared in proof, was that NELSON, whose place was nearest to the heading, had gone a few feet or fathoms along the main heading road, past the entrance to his own place, and had thus inadvertently approached the ditch where the fire-damp had accumulated. This was a very different case from that cited, and nothing could be extracted from that decision that could amount to an answer to the claim of the plaintiff, who was unquestionably in his proper place, and in the performance of his duty, when he was injured by the explosion of a mass of inflammable air, which the defendants' neglect had left liable to be set fire to by the slightest and most excusable inadvertence of a workman. It was also urged that it appeared, from the medical evidence, that the injury which the explosion had caused to the plaintiff's arm was comparatively slight, and that the permanent disability which had followed was the result of injudicious surgical treatment. It is to be observed that the medical witnesses did not agree, one of them asserting that if a particular treatment had been adopted the use of the arm might have been retained; the other, while he considered the injury to have been thereby aggravated, being of opinion that the joint would not have been thereby injured under any treatment. Be this, however, as it may; there was no doubt that the plaintiff's arm is now permanently injured; and it appeared to the Court that, if the plaintiff had suffered from bad surgical treatment, the defendants, who had been the cause of his being obliged to seek it, must be responsible for this, as well as for the injuries more directly caused by their default.

We have been thus minute in the details of this case, because the facts are very clearly stated, and we consider it an important one, likely to be followed in future instances. In the exposition of the broad principles of law, and the general reasoning of the judgment, we concur; but we were, we confess, startled at the latter proposition, that the defendants were to be held liable for the bad treatment of the injury by the surgeon employed, who would himself be answerable to his patient for his own neglect, ignorance, or mismanagement. The defendants appealed generally to Sheriff Sir ARTHUR ALISON, who, while affirming the decision, observed that justice certainly required that the damages should be modified by the injury which the plaintiff received at his own hand, and for which the defendants are not responsible. That very eminent person placed the matter on a proper footing, by explaining that the question had



been attended to in estimating the amount of damages. He added, that the plaintiff had been so severely disabled, on the whole, and rendered unable to work with his arm, "that if his present state had been entirely ascribable to the injury, the damages must have been assessed at a much larger sum—perhaps four times the amount."

Some five years since, we directed attention to the discovery of rich copper ore in the district of Namaqualand, at the Cape of Good Hope. No later than last July, we informed our readers that deposits of coal, ironstone, copper ore, and fire-clay, had been found within a short distance of Port Natal. All accounts appeared to agree that our possessions in South Africa are rich in mineral wealth, that the deposits are illimitable, and only requiring capital and enterprise to work them. The shares in the various mines are greedily taken up in the colony, and all sorts of companies are being formed—in fact, there seems to be a perfect mania for speculation. Already there are projects formed for obtaining capital from England, for the purpose of developing and further extending the mineral resources which the colony is known to possess. We by no means wish to check mining enterprise there, but, previous to the introduction of any company to the notice of the British public, we think it our bounden duty to make a few cautionary remarks.

In the year 1851-52, several gold mining companies were started, both in California and Australia. According to the prospectuses issued by the several promoters, they were immediately to return a dividend to the proprietors, and each fortunate allottee was soon to become rich. What has the result shown? Not one has paid a dividend; several have wound up; others have become defunct in no creditable manner; while those which still remain are but dragging on a wretched and lingering existence. The causes which have led to these lamentable results have been various—first, there was the disputed lease question; then a total absence of all local knowledge of the country; and lastly—the greatest fault of all—the employment of incompetent agents, many of whom knew nothing of mining or labour previous to their arrival at the scene of operations. To the position of these companies, and the incapacity of their agents, we will not here further refer—their sins of omission and commission are before the public, and to those who have embarked their capital in these undertakings we leave the task of judging them.

The Cape of Good Hope colony is rich in mineral resources: there is not capital enough in the province to develop this wealth, and application must be made to the mother country for the requisite amount to open this new and important branch of industry. The sum required cannot be advanced by any individuals: an appeal to the public will, therefore, be necessary; and we have no doubt that, if monetary circumstances are favourable, in the course of a few weeks several companies for mining in Namaqualand will be ushered into public notice.

The companies will be probably got up in the usual stereotyped manner—the directors an Irish peer, some decayed baronet, several honourables, a ruined merchant, a crafty solicitor, &c., all of whom will, no doubt, for their names, receive a certain per centage, and several thousand free shares, which they can dispose of at premiums in the market. A secretary who can pay a portion of the preliminary expenses will obtain the situation, and some relative of the governing body, without the least knowledge of mining, will be sent out to the colony, to take the direction of affairs. In nearly every instance this has been the case with our foreign mining adventures, and the consequence has been that, although the directors and employees have benefitted, the shareholders have found their money expended, not in the legitimate prosecution of the undertaking, but in the enrichment of a few individuals, who, on the faith of their names and supposed high character, have extracted large amounts of money from the public, which they have themselves engrossed.

We will not further allude to the conduct of many of these public bodies, whose infamy is now so notorious. We wish to see enterprise fostered in South Africa, but we emphatically caution the public from embarking in schemes where the only security they obtain is high-sounding names, and where incompetent agents are likely to be employed. These men may possibly rig the market, and run up the shares for a few days; but it will be done at the expense of the company. They have nothing to lose, but all to gain. Such associations should be avoided. Money should only be invested in those associations where the directors are men of business and standing, and thereby able to guarantee to the public that they will look as ably and conscientiously after their affairs as they do with regard to their own.

The want of sufficient banking accommodation is begun to be sensibly felt, and the extension of the joint-stock system is essential to meet the increasing requirements and vast commercial operations of the metropolis. It is proposed to found a new banking establishment, under the title of the BANK OF LONDON, the capital at starting, in shares of 100*l.* each, to be 600,000*l.*, with power of extension to 2,000,000*l.* The sum of 50*l.* is to be payable per share—viz., 10*l.* upon allotment, and the remainder before or upon incorporation, pursuant to an Act for regulating joint-stock banks. Its promoters have projected this institution for the purpose of affording increased facilities for banking in London and the provinces; and upon forming it on the joint-stock principle, their object is to follow in the steps of other well-regulated and prosperous establishments, and they do not contemplate the introduction of any novel system.

The admirable prospectus enters fully into the grounds which justify its formation, and the statement of the present position of the other metropolitan banking institutions furnishes the strongest recommendation to general support. That statement shows, in the present position of the five leading joint-stock banks of the City, an average dividend of 14*l.* 1*s.* per cent. per annum, after payment of income-tax, with an accumulation of reserved funds, besides an average improved value upon the capital paid-up of 118 per cent. The increased public patronage which has attended these existing establishments has led to an inconvenient accumulation of business, which urgently demands further banking accommodation. In the present untoward state of our commercial relations, much capital is necessarily thrown out of its accustomed channels, and must consequently seek investment in sources free from the general depression and fluctuation; and it is difficult to find an establishment presenting more favourable opportunities to the capitalist than that put forward under the present influential directory. The bank will necessarily be devoted to every legitimate branch—dividends, annuities, the pay of officers, naval, military, and civil, and other sources of income, will be received for customers; purchases, sales, and transfers in public funds and other stocks, will be effected, and circular notes of credit conveniently issued. The safe custody of title-deeds and securities, with convenient access, will form a prominent feature of the arrangements, with a general adaptation to all the modern modes of business. The constitution of a joint-stock bank associates with it the idea of a large proprietary, with capital and influence adequate to the performance of its undertaking; while its safe and provident working must depend on the ability and integrity of its managers. Another great source of its independence is the number and respectability of its shareholders; and it is the duty of every joint-stock association to acquire at starting, and by all possible means afterwards to maintain, that independence. We, therefore, assume with confidence that an establishment so requisite, designed for such essential purposes, founded upon such sound principles, likely to be sustained by such a proprietary, and promising such administrative management, will receive that public support which it is entitled to expect.

A treatise on this important subject, by Mr. M. G. BELL, under the title of *The Philosophy of Joint-Stock Banking*, has very opportunely appeared, in the shape of a second edition. The present work is enlarged by the introduction of separate chapters on "Foreign and Colonial Exchange," "The Origin and Progress of Colonial Banking," "Sir ROBERT PEEL'S Acts for the regulation of Joint-Stock Banks," "Free Trade in Banking," and "Commercial Panics in relation to Banking." The former edition had originally entered fully into the history and constitution of joint-stock banks, and the book, in its present shape, presents the question to the public in its several branches, and in its varied phases. The uses of capital, the purposes to which it may be usefully applied, and the management best suited to render it productive in joint-stock banking associations, are here clearly explained and illustrated; nor is the treatise confined to such institutions in Great Britain—we are also introduced to those in the United States, and we are assured that a very good history of America might be compiled from the names and objects of the numerous banks scattered over the Union.

One of the peculiarities of the joint-stock system is, that the advantages arising out of its large capital, and its improved system of transacting monetary affairs, are not limited to the immediate locality of the principal

establishment, but may be diffused, by means of the district system, by opening branches in other districts. To this an elaborate chapter is devoted, and we have others very accurately defining the character and position of directors, and their reciprocal duties with respect to managers. There are at present nine joint-stock banks having head offices in London, which may with propriety be called colonial banks; and there are also several banks in the colonies with branches in London. There are, besides, twenty-six banks established in our colonial dependencies, in the Channel Islands, and in India, which have agents in the metropolis, and our author supplies most interesting and important information as to the history, progress, and position of these extensive and wide-spread institutions. Joint-stock banks are also elaborately considered as mercantile and political institutions, and as banking is the branch of commerce which more or less regulates the amount of business in every other department, it is, of course, the most important to the trading interests of the country. In a political light, they control in some respects, and are in return controlled by, the Government, sometimes compelling the adoption of certain lines of policy, and, when acting in concert with the authorities of the State, either directly or indirectly influencing the industry and enterprise of the nation. Political economists of every shade and opinion are now agreed that the principles of free trade are generally sound in the abstract, and Mr. BELL strongly advocates the doctrine that exclusive privileges and restrictive laws, even in banking, are detrimental to the commercial interests of the country, and impede the progress of society at large.

Without committing ourselves to any peculiar theoretical opinions on this and other branches of this extensive subject, we must freely concede that the several heads which it embraces are calmly and ably discussed in the treatise before us, and we cannot hesitate strongly to urge its attentive perusal on all those, who desire full and accurate information on the system of joint-stock banking in its varied relations to trade and to the public.

We alluded, in our last Journal, to the proceedings instituted by the Factory Inspector, under instructions from the Government, against the proprietors of certain cotton mills in the neighbourhood of Oldham, to recover penalties under the Factory Act from them, for not having properly fenced their machinery. One of these three cases—that against Messrs. WORTHINGTON and SONS, of Hollinwood—had been heard before the mayor and a magistrate, at Oldham, on Monday week. The offence charged in the information was for "having unlawfully neglected to fence a certain main horizontal shaft in their mill;" and as it was understood that their decision would, in a great measure govern the other cases pending, it was postponed for a week. On Monday last the adjudication was pronounced, inflicting a penalty of 5*l.*, with costs.

The magistrates had availed of the interval to give the case very serious consideration, and had also submitted the evidence taken before them to eminent counsel, so as to have the benefit of his opinion and advice. There were very serious questions raised, and rather difficult points of law argued; and although counsel was of opinion that the defendants were liable, in which opinion the magistrates concurred, it seemed agreed that in a case of such novelty and importance their opinion should be subject to review by a higher authority. It is open to the defendants to appeal under the 70th section of the Factory Act, and when notice of appeal has been given, the parties may agree to a special case for one of the courts at Westminster Hall, pursuant to the 12th and 13th Vic., cap. 45, sec. 11, by which means the decision of one of the superior courts may be obtained on a question of such importance to the manufacturing interests of the country. Messrs. WORTHINGTON intimated, of course, their intention of appealing, and penalties of 5*l.*, with costs, were nominally inflicted in the other cases, but it was understood that they were also to abide the result of that appeal.

A report of the proceedings at a general meeting of the CWMYDLE ROCK and GREEN LAKE COPPER MINING COMPANY will be found in another column, and after so many recent exposures of mismanagement in mining, it is a pleasing duty to call attention to any adventure conducted in a manner calculated to raise British mining to the position it ought to hold in this great commercial country. It may be remembered, when this company was first started, the most extravagant promises were made, which ended, as is too frequently the case, in a corresponding disappointment,—in fact, when the present committee of management were elected, there were no less than three Chancery suits, and a number of actions at Common Law, instituted against the shareholders; and it required gentlemen of no ordinary courage, under such circumstances, to undertake joining such a concern. But, fortunately, parties were found who ventured upon the difficult task, and we sincerely hope they may be amply rewarded. Since their appointment, they have succeeded in settling the three Chancery suits and the other legal proceedings; and, according to the statement of their able chairman, Mr. SOWELL, they appear to be progressing steadily and satisfactorily. In the year 1852 the ore sold amounted to 150*t.*; in 1853 to 800*t.*, and in 1854 to 1600*t.*; and, as all their improvements are completed, they look forward this year to still brighter days.

When a mining company has the advantage of an indefatigable committee of management, it generally follows that those employed by them give satisfaction to the shareholders; it must, therefore, have been pleasing to the chairman to hear one of his principal opponents bearing testimony to the admirable manner in which the accounts were kept, and the courtesy displayed by the secretary, when any shareholder called at the office for information. The chairman observed that every account and report was always open for inspection; that they deserved success; and if they could not obtain it, it should not be from any fault of the committee.

We can only add, that if companies were generally conducted in the same open and candid manner as the Cwmyle Rock appears to be, mining, as an investment, would become more popular than it has hitherto been.

The Salvador House management has at length yielded to the force of truth; although, from the extraordinary pertinacity with which the ex-manager-director of the Tamar Mining Company insisted upon retaining his functions, it may, perhaps, be doubted whether such marvellous concession has not been extorted under the pressure of circumstances, rather than graciously extended from conscientious motives, or from any desire to do justice to the numerous body of shareholders claiming the restitution of their rights. These reflections are forced upon us, on looking at the treatment pursued towards gentlemen possessed of such acquisitions, and of such reputation, as the committee of investigation deputed to look into the affairs of the Tamar and other property conducted under the mysterious and secluded management of Salvador House. Those who are acquainted with the system of accounts adopted in that establishment, will readily conceive the laborious task imposed upon the committee. It was not too much, therefore, to expect that every facility would have been afforded them in the prosecution of their enquiries, and that some consideration would have been shown for the loss of valuable time. Instead of which, we find every kind of artifice and subterfuge resorted to, with a view to exhaust their patience, and that frequent efforts were made to thwart them in the due performance of their duties. Under such circumstances, can it be a matter of surprise that the proceedings have been watched with considerable interest, and that the conduct of the ex-manager has been visited with reproach?

The affairs of the Tamar Company, however, are now in good hands. Mr. CARR, whose honourable and uncompromising conduct has so often been the subject of remark, retains his seat at the board; while Messrs. HADDOX, DUNSFORD, COOKKNY, and BURLS, are elected directors in the room of the retiring directors. Active steps will be taken to re-organise the local management, than which, as was observed by Mr. DUNSFORD, nothing could have been more viciously conducted. New rules and regulations will be submitted for the approval of the shareholders at an early period, giving them the power of electing directors: it is also proposed to hold quarterly general meetings, instead of annual meetings. Other reforms are in contemplation; and looking at the present position of the property, there is every reason to believe that the most satisfactory results will speedily follow.

While, however, we offer our congratulations to the shareholders, whose valuable property has thus been rescued from impending ruin, we cannot but express our opinion that the disclosures which have been made entitled the committee to the warmest thanks of the mining interest generally. The investigation, so ably, so zealously, and so honourably conducted, has had a salutary effect: it has opened the portals of justice, and all that now remains for the shareholders in other mines conducted at Salvador House is, to avail themselves of the opportunity which is thus afforded them of securing control over their own property.

With this view, it may be observed, a meeting was convened at the London Tavern, on Monday last, and although it was not so numerously attended as might have been expected, it was conducted in a business-

like manner, and will, no doubt, have the effect of ultimately securing all that can be desired: indeed, it was publicly stated by Mr. BARNARD (Mr. STAINSBY's chief clerk) that no further resistance would be shown to the wishes of the shareholders.

The meeting on Monday was attended by Mr. PATRICK JOHNSON, the official assignee of Mr. Commissioner EVANS'S COURT, and it appeared from the statement of that gentleman that he had taken into his possession all the returns which had been received. He also expressed his readiness to afford the shareholders every facility in his power to obtain redress, and to give them every information consistent with his duties. It was, however, considered highly essential that no time should be lost in effecting as speedy an arrangement as possible, and with this view, a resolution was passed that Mr. STAINSBY be requested to summon, within a week, the committees held at his office, and also the shareholders of those mines which have no committees, in order to consider the position of the various mines, and to make arrangements for their future management. The result of such a resolution may be easily foreseen.

The report of the committee of investigation appointed by the shareholders in the ENGLISH AND AUSTRALIAN COPPER COMPANY is inserted in another column, and will be perused with much interest. It gives a very lucid account of the affairs of the company; the principal difficulty they have had to contend with being overcome—as labour was now returning to its ordinary channels, had become more abundant, and was likely to continue. At the forthcoming meeting the directors will propose to raise an additional capital of 35,000*l.* by debentures, payable in either two or three years. The necessity for raising this amount arises from the large sums absorbed in the colony by the purchase of ore, the works having been partially stopped through the difficulty of procuring labour. The committee, after consultation with the board of directors, were, we understood, unanimous in recommending the raising of the additional capital; and we hope they will not be disappointed in their belief that the company will shortly be in a position to pay dividends.

#### NOTES ON IRISH MINES.

As every information relative to the mineral produce of Ireland must be interesting to the capitalist, and to every well-wisher of that country, so highly favoured by Nature in those descriptions of produce peculiarly conducive to the necessities and comforts of life, it is with much pleasure we now refer to a small pamphlet under the above title, by the Rev. S. Houghton, M.A., F.T.C., Professor of Geology in the University of Dublin. This number is confined to a description of the mines of LUGANURE, in Wicklow; another is devoted to the sulphur mines of Ballymurtagh, in the same county; and a third to the copper and lead mines in the Kenmare Valley, county Kerry. The Luganure Mines are the property of the Mining Company of Ireland, situate in two valleys, Glendalough and Glendalough, the streams from which unite a short distance below the Seven Churches. The general direction of the lodes is north and south, consisting of the Fox Rock lode, with an underlay of 18 inches in a fathom west; Moll Doyle lode, 45° west; Hero lode, 32 in. per fathom; Raplagh and Hawk Rock lodes, 31 inches in a fm. west; and West Luganure lode, 29 inches in a fm. west. The Old Luganure lode is the prolongation of the West Luganure; and the Luganure lode, the one now principally worked, is a continuation southward of the Old Luganure lode. The lofty ridge of mountains called Comaderry separates the two valleys, and the mine is worked by a series of adits driven on the lodes, and through them the mine is unwatered and the ore extracted. They comprise the shallow adit, 166 fms. in length, and 1667 ft. above the sea level; Weaver's adit, 273 fms. long, 1552 ft.; the deep adit, 518 fathoms long, 1438 feet; and Richard's adit, 330 fathoms in length, and 1037 ft. above the level of the sea. The deep adit is the lowest which can be driven, its mouth being nearly on a level with a stream from Lough Nahanagan; and the economical working of the mine depends on the favourable situation of the lode, a great part of which is found above this deep adit. A cross-course, running magnetic east and west, intersects the lodes at an angle of 64°, on which an adit was commenced and driven 45 fms., with a view to unwater all the lodes 514 ft. above the sea level, and probably discover others, but which was abandoned in consequence of the great cost, 12*l.* per fm., and the distance to drive, 870 fms.

The necessity for this adit has, however, very fortunately been removed by a discovery made by the son of Capt. Clemen, the company's agent, of the Luganure lode, on the Glendalough side of Comaderry mountain. This lode has been opened by means of three levels, the upper being 147 fms. and 1105 ft., the middle 95 fms. and 847 ft., and the lower 70 fms. in length and 491 ft. above the level of the sea, respectively. High up the Glendalough valley is a mine called Van Diemen's Land, having a deep adit 13 fms. long and 1179 ft. above sea level, and a cross-course adit 18 fms. long and 1256 ft. above the level of the sea, and which is interesting from the fact of copper pyrites being found in it, on a cross-course extending eastward beyond the Glendalough Mine, which throws off a southern branch, known as Weaver's old level, from the circumstance of Mr. Weaver having driven on it 69 fms. The following table, by Mr. Purdy Allen, the secretary to the company, shows the produce of the mines for the last 20 years:—

Year.	Tons.	Value.	Year.	Tons.	Value.
1834	352	£ 4,362 16 1	1844	418	£ 3,401 5 5
1835	356	5,940 6 5	1845	418	4,717 15 5
1836	820	11,506 10 8	1846	440	4,670 15 4
1837	1367	11,050 9 11	1847	445	4,479 14 3
1838	1045	10,964 17 4	1848	398	2,833 5 3
1839	760	7,531 7 7	1849	471	4,203 11 2
1840	754	7,641 16 5	1850	692	5,434 3 5
1841	608	6,849 18 7	1851	715	8,138 14 9
1842	732	7,462 10 4	1852	996	10,127 11 9
1843	517	4,796 8 4	1853	932	11,742 11 8

Contrary to all the experience of miners in Cornwall, Luganure presents a remarkable example of lead ore being worked exclusively in granite, the lodes being formed principally in a fine-grained rock, differing in texture from the granite of the country, and generally decomposed. In Cornwall, this stratum produces tin, of which, we believe, not a specimen has been found in Ireland.\* The lode varies from 6 in. to 3 and 4 ft. in width, and the occurrence of fluor-spar on its southern wall is interesting, as connecting it mineralogically with the mining district of Glenmalur, in the next valley south. The fluor is mostly massive, of a pale violet green colour, and sometimes crystallised, of a light brown, in cubes of 2 inches. The lode also contains a pale green steatitic mineral, arising from the imperfect decomposition of felspar and mica, and consisting partly of an hydrated silicate of alumina, retaining much of the original alkalies. The mica in the granite is of two kinds, a transparent grey, with a high reflecting power, and a dark brownish black mica, possessing considerable light absorbing power. The quartz and fluor-spar lode carries a leader of lead ore, 6 in. wide, and the decomposed clay lode has in its centre a vein of the same character, from 1 to 2 inches wide, and a "horon" intersecting the Glendalough lode, presents a striking instance, on a large scale, of what may be seen in miniature in the veins of granite, intersecting massive granite all through that part of Wicklow.

**SILVER-LEAD MINING IN CUMBERLAND.**—We have received a prospectus of the Tynehead Mining Company, which has been re-constituted, in 6400 shares, strictly on the Cost-book System, with a view to extend operations on the adventure with a spirit commensurate with its generally estimated worth. The mine is situated on the north-east slope of Tynehead Fell, at Alston, in Cumberland, in the very centre of the richest lead-producing district in England. It is bounded on the north and west by the Tyne; south by the Clargill Burn; and on the east by valuable mines belonging to Greenwich Hospital. The grant extends 1000 yards on Sir John's vein; it is held under lease for 21 years, at dues of 1-7th in ore, including all rental. There have been produced at Stow Crag Mine 4548 bins of lead, and 784 tons of copper; the former yielded 84 per cent. in lead, and 11 ozs. 19 dwts. of silver to the ton. Calvert Mine, 4162 bins of lead, containing silver; Dosey and Tyne Boggs Mine, 2837 bins; Clargill-head Mine, Sir John's vein, 549 bins, produce 80% per cent., and 23 ozs. 10 dwts. of silver to the ton. The parish of Alston in 1768 produced 15,000 bins; in 1767, 24,500 bins; 1768, 18,730 bins; in 1825, 29,865 bins; 1826, 32,076 bins; 1827, 25,047 bins; 1844, 16,230 bins; 1845, 17,266 bins; and in 1850, 17,775 bins. In 1849 the produce of lead ore in Great Britain was 80,750 tons, and 58,701 tons of lead, of which 29,803 tons of ore, yielding 20,850 tons of metal, were raised in the mines of Cumberland, Northumberland, Durham, and Westmoreland, in the centre of which mineral district the Tynehead mines are situated. The great copper vein is 300 feet wide, and is considered by Mr. John Taylor to be a collection of branches rather than a single developed vein, and that it will make large deposits of copper ore in depth. Mr. George Millican, mineral agent, has reported most favourably of the prospects, and to insure the greatest possible degree of security, regularity, and economy, the rules and regulations have been carefully drawn up and revised; the accounts will be made up quarterly. No one can hold less than five shares, and any proprietor may at any time retire from the undertaking, and thus determine his liability.

\* Tin has been found in the gold washings from Croghan Kishalee, Co. Wicklow.



## THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]

FEB. 15.—Since my last, nearly every description of out-door labour has been either totally suspended, or carried on under very trying circumstances. A heavy fall of snow, followed by intense frost, has covered the district for miles round, and stopped nearly all bank-work at the mines, and on the canals. The weather and the war are the only two subjects of general consideration, and we are all anxiously looking for a change in both. The number of hands thrown out of work by the frost is very great, and the distress amongst the labourers and out-door mechanics is really assuming a very serious aspect. Thousands are daily crowding round the parish offices for relief, and the clamour for bread is so loud as to have rendered a relaxation of the Poor Law order indispensably necessary in this town, and other parts of the district. In Wolverhampton, the pressure is also severe, and increased exertions have become necessary to meet the demands of the poor. During the last few days, the attention of the Poor Law Board has been directed to the state of the labour market, and Mr. Weale, Assistant Poor Law Inspector, attended several meetings of the Guardians of the Poor, yesterday and to-day, for the purpose of concerting measures to meet the emergency. The result of their deliberations has been a great increase in the staff of officers, visitors, and assistants of various sorts, to expedite that out-door relief to the poor which can be no longer delayed. The mechanical pressure on the parish is also, I am sorry to say, increasing. The hands at many of the large manufacturing concerns have been either entirely or partially discharged, as may be supposed, with the utmost regret, by their employers; and no small inconvenience to a numerous class of respectable mechanics has been the consequence. The general trade, therefore, of this town and district is, on the whole, still in an unsatisfactory state.

The make of iron is slowly but steadily diminishing, and quotations are unsteady. Our advices from America are not more reassuring than they have been during the last two months, and very few orders for iron are in course of execution for that market. Nor does the home market indicate any improvement, with the exception of some brisk orders for the completion of Government work, received by Messrs. Fox, Henderson, and Co., and a continuance of the demand for naval and military purposes. The sales during the week have been very limited, and the order-books are light. As yet, the wages question remains untouched, although it is no small source of difference of opinion amongst the leading masters.

In the general Metal Trade, there has not been any material change. Copper maintains its price, and Tin has rather receded; but, considering the comparatively limited demand, the firmness of the metal market is rather surprising.

The Coal Trade is exceedingly active, owing to the severity of the weather, but very great inconvenience is felt from the canals being frozen, particularly in those parts of the district where the railways are not available. Best coal is now being sold at from 17s. to 18s. 6d. per ton, and inferior at from 2s. to 3s. under those prices.

The following specifications have passed through Mr. Shaw's office during the past week:—

Mr. Edward Monson, of Birmingham, has specified his patent for new or improved machinery for manufacturing, cleaning, and polishing daguerotype plates. The sheet of plated copper to be operated upon is fixed upon a bed, which is situated upon a table or platform. The bed and platform have motions at right-angles to one another. The platform on which the bed rests has motion given to it by means of an arm, connecting rod, and crank, the crank being attached to an axis, which receives motion from the main shaft of the machine. By the rotation of the axis, a reciprocating motion is communicated to the platform. The bed is moved so as to have a reciprocating motion, transverse to the platform, by means of cords attached to it being wound upon a pulley. The plate of metal thus moved is operated upon by a hammer, burnisher, and buff or buffs, attached to the bottom of a vertical shaft, immediately over the plate. The hammer, burnisher, and buff or buffs, are made to act on the surface of the plate by suitable mechanical arrangements. The hammering and buffing, or grinding of the plate, may be carried on at the same time.

Mr. James Griffiths, of Wickham Market, Suffolk, has just specified his patent—a new or improved lever bit for horses. This invention consists of a bit for horses, on the cheeks of which are levers. The upper ends of these levers are connected together by a curb-bar or chain. A rein is attached to the lower ends of the levers, and when the rein is tightened, the curb or chain connecting the upper ends of the levers bears against the under jaw of the horse, giving the rider or driver great command over him.

P.S.—The "Ironmaster," in his letter of this day, says—"At last the Ironmasters in South Staffordshire have resolved to reduce wages. At a meeting held at Wolverhampton on Wednesday, it was resolved to give the puddlers notice of a reduction of 1s. per ton, and the mill-men one in proportion. This has been delayed full long, but it has not come at an inopportune time. The works are not fully employed, and, in consequence, the men have not the grounds they had during last year to resist the step,—indeed, it would be unjust towards the employers to do so, as I am sure (and I have said so several times lately) that, with bars at 9d. and a scale of wages equal to 12d. per ton, no one could work to a profit. Orders are coming in rather better. Pigs are increasing in stock in South Staffordshire. Materials continue too high for the present price of wrought-iron, and there is no probability of any rise in the price of iron. The canals are now impassable from ice in nearly the whole of the district. Shipments of Scotch iron were never so heavy. Some contracts have been made for best South Welsh pigs, to go into France. The North Staffordshire men are under notice for a reduction of wages."

## IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

FEB. 16.—The past week has been a dull one altogether, both commercially and politically. The general condition of the trade is depressed, and business inactive, although it is represented by some that the demand for manufactured iron is on the increase. The severe frost which is impeding the navigation of the canals and rivers interferes with operations at the works. There is considerable activity prevailing at those works engaged in the manufacture of weapons of war.

The Steel Trade is in a depressed state, owing to various causes; the principal one being the absence of American demands.

The continued severity of the weather maintains a brisk demand for coals. There is not, however, anything like the same amount of activity which prevailed last season, arising principally from the increased production which has been going on during the year, and a falling off in the consumption for manufacturing purposes. Since last winter the attention of the principal coalmasters has been directed to supplying the London markets, and those who happen to have depots there have been stocking them well throughout the summer, so that at the commencement of the present inclement season the demand has been only moderate. Now that the northern coal laden vessels are ice-bound, there has been a drain upon those stocks, which are fast burning off. There can be no doubt, that should the present unfavourable weather continue, coals will be very scarce in London, if the computation be true that our railways are only enabled at present to convey scarcely one-third of the amount required for general consumption in the metropolis. Every effort is being made in the country to supply the London markets. The railway companies are aiding the coalmasters in their endeavours, by affording every facility of transit. It is, therefore, to be hoped that prices will not materially advance, even should the weather prevent the arrival of the coaling vessels.

The South Yorkshire Railway and its branches have had a remarkable effect in developing the mineral wealth of the South Yorkshire coal field, which, from its inland situation, was comparatively unknown before the railways brought it into notice, and made it what it now is—one of the most prominent of our mining districts. Within the last 18 months a great number of new coal shafts have been sunk in this locality by various firms and individual proprietors, among whom the names of Earl Fitzwilliam, the Messrs. Taylor, of Hemingfield, and the Wombwell Main Colliery Company, stand prominent. The additional coal beds which are thus being opened in all directions will afford to the public an immense supply of coal, of excellent quality, at a moderate price. The neighbourhood of Elsecar, about midway between Rotherham and Barnsley, presents the most striking proofs of the industrial movement which now characterises the district in question. The large iron works of Earl Fitzwilliam and those of Mr. Dawes are being rapidly extended, and now give employment to a large body of workmen. The noble earl, foreseeing the require-

ments of the increasing population, has recently erected at Elsecar a model lodging-house on the most approved principles of construction, containing 43 apartments, replete with every comfort and convenience. His lordship has also built a market square and a post-office, and laid out spacious streets of remarkably neat and comfortable dwellings. A church and public school were provided some time ago by his lordship, who thus evinces his anxiety for the moral and social welfare of the increasing population of this thriving district. But for the railways which now wind through the valley of the Don, the "winnings" of the hidden treasures of the earth in this locality would have been but slowly attained, and the energy and enterprise which now animate the district would never have been evoked.

The consumption of smoke in Sheffield is exciting considerable interest amongst the manufacturers, several of whom have been summoned before the magistrates. After long investigations, the parties were allowed a month to consume their smoke. Several of the parties contended that the movement would have the effect of driving the trade from the town.

The industrial products of Yorkshire will be well represented at the approaching Paris Exhibition. There is a host of exhibitors from Sheffield, Leeds, and other large towns.

It is understood that several new collieries, and a smelting furnace, will be erected in the neighbourhood of Chesterfield during the ensuing spring. The Harland Colliery, the property of Messrs. Knowles and Co., is progressing, but the men have not yet sunk to the coal.

Anthracite coal is coming daily into greater use, and a number of new pits in the lower basin of South Wales have been opened to supply this invaluable product for marine engines. Large purchases of patent fuel have also been made for the French Government.

The condition of the general trades in Yorkshire and Derbyshire is unfavourable; but the mining districts do not experience the depression so much as the densely populated towns where manufactures are extensively carried on.

There is nothing new in the lead mining districts of Derbyshire this week of any importance. Indeed, the inactivity of the mineral trades generally must necessarily make our communication brief.

## STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

FEB. 15.—As regards our transactions on the Stock Exchange during the past week, I have only to say, in the words of Menschikoff, that "nothing of importance has taken place." The Government Funds still show signs of heaviness, Consols and New Three per Cents. having been done to-day at 90½, or a decline of ½ since Thursday last. In Shares, prices have fluctuated but little, and I may here remark that, with one exception, not a single transaction has taken place in shares for the account, so adverse are our friends on this side to speculation just now. Nearly all our railway companies, including the Great Southern and Western Railway, and the Belfast Junction Railway, will hold their half-yearly meetings at the end of the month, so that we may expect a little more business when the probable dividends ooze out; at present, business is very limited indeed.

The following statistical information will prove of interest to all concerned in the mineral produce of Ireland:—

KNOCKMAHON.	Tons.	Amount.	Av. price.
First quarter, 1853	999	£13,081 17 6	£13 1 11
Second quarter	608	7,069 18 6	10 11 8
Third quarter	956	9,098 4 6	9 10 6
Fourth quarter	730	9,309 13 0	12 8 3

12 months ending 1853	3373	£38,559 13 6	£11 2 8
First quarter, 1854	761	£9,597 8 0	£13 0 0
Second quarter	1453	16,288 3 6	11 9 0
Third quarter	1175	13,271 0 0	11 5 10
Fourth quarter	1002	15,563 12 6	12 15 5

12 months ending 1854	4421	£53,020 13 0	£11 19 10
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From the above figures, it will appear that this mine has in the past 12 months increased its produce one-third as compared with the year 1853, and realised £3,020, 13s. against a return of £3,559, 13s. 6d. in the preceding 12 months; while the average price for 1853 was 11s. 2s. 8d., and for the past 12 months 11s. 19s. 10d., being an increase of 17s. 2d. per ton.

BEREHAVEN.	Tons.	Amount.	Av. price.
First quarter, 1853	681	£3,465 11 0	£12 8 7
Second quarter	2011	10,183 12 6	9 10 9
Third quarter	2004	18,551 10 6	9 5 1
Fourth quarter	1172	12,327 13 0	10 10 4

12 months ending 1853	5868	£58,528 7 0	£9 19 6
First quarter, 1854	957	£10,581 11 6	£11 1 1
Second quarter	1309	13,173 18 6	10 17 11
Third quarter	1835	18,965 5 0	10 6 8
Fourth quarter	1029	10,637 6 0	10 6 6

12 months ending 1854	5030	£58,348 1 0	£10 12 1
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The returns from this mine for the past year show a slight falling off, being 538 tons less than the preceding 12 months, and also a deficit in amount of £180, 6s.; there is, however, an advance in price of 12s. 7d. per ton.

BALLYMURTAGH.	Tons.	Amount.	Av. price.
First quarter, 1853	357	£1,911 10 0	£5 7 1
Second quarter	462	1,532 17 0	3 2 0
Third quarter	329	1,303 15 6	4 1 5
Fourth quarter	187	975 19 0	5 4 4

12 months ending 1853	1326	£5724 1 6	£4 6 4
First quarter, 1854	301	£1,278 16 6	£4 5 0
Second quarter	428	2,161 4 6	5 1 0
Third quarter	280	893 11 0	4 9 6
Fourth quarter	308	1,429 17 0	4 13 10

12 months ending 1854	1237	£5763 9 0	£4 13 2
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There is but little difference in the quantities sold in each year, while the amount in money is nearly the same; the price realised, however, it will be observed, is 6s. 10d. per ton in advance on the last 12 months. It must be borne in mind that the great produce from this mine has been from the sulphur, or iron pyrites, and which have enabled the directors to declare dividends. The copper returns may thus be considered as a *bon bouche*.

CRONRANE.	Tons.	Amount.	Av. price.
First quarter, 1853	45	£404 8 0	£9 0 0
Second quarter	38	401 3 0	10 10 10
Third quarter	38	391 0 0	10 6 0
Fourth quarter	—	—	—

12 months ending 1853	121	£1196 11 0	£9 17 2
First quarter, 1854	24	£280 10 0	£11 13 4
Second quarter	22	267 11 6	12 1 10
Third quarter	11	244 1 6	22 3 7
Fourth quarter	1	31 8 0	34 8 0

12 months ending 1854	58	£830 11 0	£14 4 10
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This is another sulphur mine, and connected with Tigrany, the copper sold being principally in the state of precipitate. The returns have fallen off the past 12 months one-half in quantity, but the average price, it will be seen, is better, the comparative prices being, for 1853, 9s. 17s. 2d., and for 1854 14s. 4s. 10d., or a difference of 4s. 7s. 8d. per ton in favour of the latter; of course this has no reference to the return of sulphur ores.

TIGRANY.	Tons.	Amount.	Av. Price.
First quarter, 1853	3	£142 11 6	£47 10 6
Second quarter	7	141 18 6	20 5 6
Third quarter	3	105 0 0	35 0 0
Fourth quarter	—	—	—

12 months ending 1853	13	£389 10 0	£30 0 0
First quarter, 1854	3	£126 3 6	£42 1 0
Second quarter	3	109 17 6	36 12 6
Third quarter	5	213 15 6	42 15 0
Fourth quarter	1	34 8 0	34 8 0

12 months ending 1854	12	£484 4 0	£40 7 0
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Here we have again the returns of precipitate from a sulphur mine, it being connected with Cronrane, in the Wicklow district; the average price of the 25 tons, which yielded 8734 14s., being close on 35s. per ton.

LACKMORE.	Tons.	Amount.	Av. price.
First quarter, 1853	44	£233 0 0	£5 5 6
First quarter, 1854	9	£85 9 6	£9 5 6
Second quarter	94	903 10 0	9 12 1
Third quarter	56	454 19 0	8 2 6

12 months ending 1854	159	£1423 18 6	£8 19 1
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The quantity raised during the past 12 months is a considerable increase on that of the 12 months preceding, although to a limited extent; the produce, however, has yielded better returns, the first sale being made up in part from halvans, or ores raised by the former company.

CONRORRE.	Tons.	Amount.	Av. price.
First quarter, 1853	9	£480 12 0	£57 15 6
Second quarter	27	517 10 0	19 3 0
Third quarter	4	140 0 0	35 0 0
Fourth quarter	—	—	—
12 months ending 1853	40	£1088 2 0	£27 4 0

The above embrace all returns by sales at public ticketing for the past two years; but we believe precipitate has been sold to private houses during the past 12 months: one parcel, it will be observed, realised 47s. 15s. 6d., the average producing 27s. 4s. per ton.

HOLYFORD.	Tons.	Amount.	Av. price.
Second quarter	293	£479 12 6	15 3 8
Third quarter	100	3006 8 0	20 1 3
Fourth quarter	135	3618 3 6	23 6 10
12 months ending 1853	555	£10,104 4 0	£18 7 5

First quarter, 1854	108	£2256 12 6	£20 17 11
Second quarter	139	2819 8 0	20 5 7
Third quarter	159	2903 5 0	18 5 1
Fourth quarter	149	3091 4 0	20 2 10

12 months ending 1854	555	£10,979 4 6	£19 15 7
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The ores of this mine realised high prices, as will be observed by the several sales, the total for the two years being 1105 tons, yielding 21,013s. 8s. 6d., or an average of 19s. 1s. 7d. per ton.

BALLYMURTAGH.	Tons.	Amount.	Av. price.
Second quarter, 1853	20	£34 10 0	£2 14 6
Third quarter	12	47 8 0	3 19 0
12 months ending 1853	32	£101 18 0	£3 3 5
Second quarter, 1854	42	£128 2 0	£3 1 0
Third quarter	11	39 12 0	3 12 0

12 months ending 1854	53	£167 14 0	£3 3 5
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This is a sulphur mine, contiguous to the Ballymurtagh, and worked very extensively for that article by Mr. Hodgson; to which the utmost importance is to be attached.

Having enumerated the several mines, I will take the remaining six mines, which appear within the two years to have sold ores; they will be found as follows:—

South Cork	Tons.	Amount.	Av. price.
Coosheen	62	£344 6 0	£5 11 1
Laxey	48	905 11 0	20 2 5
Laxey	68	332 10 0	5 12 6
Liburde	40	351 7 6	9 10 8
Misen Head	72	72 9 0	10 3 0
Crookhaven	43	194 0 0	4 10 3

The 6 mines in 2 years	263	£2,280 3 6	£8 12 1
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It is unnecessary to make any remark on these six mines, except as to Coosheen, which, during the present year, made a further sale of 54 tons, producing 609s. 6s., or an average of 11s. 6s. 6d., being little more than one-half the amount realised by the previous parcel.

Having carefully gone through this list, we have the following result for the past two years, ending the 31st of December, 1854:—

Produce, tons.	Amount in money.	Av. price.
Berehaven .....	10,898	£111,876 8 0
Knockmahon .....	7,794	91,380 6 6
Holyford .....	1,105	21,083 8 6
Ballymurtagh .....	2,563	11,487 10 6
Cronbane .....	179	2,023 2 0
Lackmore .....	203	1,656 18 6
Conrorre .....	40	1,088 2 0
Tigrany .....	25	£73 14 0
Ballymurtagh .....	85	269 12 0
The six mines .....	265	£2,360 3 6
Total .....	23,157	£244,219 5 0
		£10 10 11

The ores of the General Mining Company and others, whose sales are private with the smelting-houses, it is hardly necessary to say are not included in the above list, while the returns are confined to copper ores.

Having furnished you with the returns from the several mines, I will offer some remarks on the dividends paid, and the current prices during the past two years, reserving until next week some remarks, although the figures may be said to speak for themselves. I shall confine my observations to three companies, those of the Mining Company of Ireland, the Wicklow Copper Mining Company, and the General Mining Company for Ireland; having no data with reference to Berehaven, and the moor dividends declared by the Kennare and Lackmore being, as a matter of course, omitted, I may say a word or two as to the other schemes, having the prices before me since December, 1852, to which I am indebted to our Official List here, and to the columns of the *Mining Journal*. I am not, therefore, very apprehensive of being called up on account of any error.

WICKLOW COPPER MINE.—The shares in this mine have, without any real or justifiable cause, fluctuated during the past two years to an extent of no less than 36s. per share on 6s. paid, the highest price being 74s., and that quoted during the past month being 38s.; in other words, the capital of the company of 25,000s., which is divided into 5000 shares of 5s. each, at one time was raised in market value to 370,000s., but which subsequently dropped to 190,000s., or about one-half. The prices of shares in January, 1853, when a dividend of 50 per cent. per annum was declared payable in March, were as low as 43s., but rose in March last to 74s., being done in the same month at 49s. 10s.; in the ensuing month the prices varied from 67s. to 73s., being the extent of fluctuations in so limited a period, while, as before observed, the market value has since depreciated nearly 50 per cent. The dividends were, in January, 1853, after the rate of 50 per cent. per annum on the capital paid up, or 50s. per share; in July 60 per cent., and the two subsequent half-years 65 per cent. At the last half-yearly meeting, held early in January, there was no dividend. It would thus appear that the largest dividend declared has been at the rate of 65 per cent. per annum, which, on the capital of 25,000s., is equal to 14,375s.; while, at a time when the dividend was only 50 per cent., or 12,500s. per annum, the market value of the shares was 370,000s., or nearly 30 years' purchase, thus yielding little more than 3 per cent. The price of shares for the past six months, until the "fact" announced that there would be no dividend this half-year, may be taken at 60s.; and assuming that there was a dividend at this moment, at the same rate of 65 per cent., as paid in the preceding 12 months, the returns would only be 6½ per cent. on the market value, or, in other words, equal to 16 years' purchase.

MINING COMPANY OF IRELAND.—The shares in this company were marked, in Jan., 1853, at 13s. 10s.; subsequently, in the month of March, they rose to 22s. 10s.; in the next month to 17s. 10s.; and in the Sept. following dropped to 14s.; making no less a difference in market value, in some three or four months, of an advance of nearly 180,000s. increase, and a sudden decline, in the following four or five months, of 160,000s., or, extreme variation in prices, of 340,000s. In May, 1854, another re-action took place, when they reached 18s.; again dropped as low as 15s. 10s. in the month of July; but at the close of the year were quoted 17s. 10s. The dividend of this company, in January, 1853, was at the rate of 20 per cent. per annum; and for the subsequent three half-years, 30 per cent. per annum; and for the past six months, declared in January, 40 per cent., or 6 per cent., being 16½ years' purchase.

GENERAL MINING COMPANY FOR IRELAND.—The price of the shares in this company, in January, 1853, were 2s. 10s.; in April advanced to 6s. 10s.; and in the July following were quoted 2s., from which they realised, in Jan., 1854, to 3s. 10s.; and were again marked, in July last, at 5s. 10s.; the last price, nominally, 2s. Calls amounting to 17s. 6d. per share have been made in the past two years, and one dividend declared in June, 1853, of 3s. 3d. per share.

With reference to other mines which I find quoted, in most cases nominally, in the lists referred to, I find CROOKHAVEN, shares in which, in the early part of 1853, are marked 20s. to 25s., the only other quotation being 14s. Whether there is a market value attached to them at this moment, or not, I am not prepared to say.



The shares in this company were, in January, 1853, quoted at 17. 10s., some done at 2s. 6d., and now marked 5s. 10s. There are 100,000 shares in this concern—50,000 free shares, 40,000 shares issued, and 10,000 shares reserved. I do not know what the latter are valued at.

RINGBELL.—Marked 3d.

SOUTH COCK.—From 17. 10s., in February, 1853, dropped to 1/2 in December of that year, remaining at the same quotation for eight months, and for the past 12 months have been marked in the Share List at par, although it must be a nominal or fictitious price.

CARREY WEST appear to have dropped from 1 1/2 to 1/2. This company may be considered now defunct.

GLENVALIN, CARVILLEEN, CONNEMARA, and sundry others, after having been issued at a premium on the London market, have ever since been in a state of decline, and there is every appearance of this cold weather bringing them to the freezing point, and below zero.

Thus much for mines here; and glad am I, as doubtless will be your readers, that this synopsis, or whatever you may term it, is brought to an end. All I can say is, my object is to put facts before the mining interest, and the capitalist, and let them judge for themselves of the benefits likely to accrue, and the prospects held out, bearing the old adage always in mind, that "gold may be bought too dear."

It has excited no little surprise here to find, from a paragraph in your last Journal, that no meeting of the Coosheen Mining Company took place, there being only one proprietor present. This, I think, requires explanation and elucidation. We have here a company with 20,000 shares, and a capital of 20,000, paid up, quoted at 1/2 prem. in your Share List, and with, it is to be presumed, a tolerably large proprietary; and yet no one attends to receive reports, or to inspect the accounts. Two cargoes of ore have been sold, amounting to 99 tons, or 1514l. 17s.; and although the directors did not announce a dividend out of the produce, yet one would have thought that some one proprietor would have been present, if merely to have asked the question what the ore sold cost in raising, dressing, and other charges?—what was the balance at banker's?—and also put some other relative questions touching the balance-sheet.

One thing seemed somewhat strange to me—the directors, if I err not, did not generally advertise the meeting. They could not issue circulars, for it is a scrip company; and, as all the world knows, or at least such portion as are interested in mining pursuits, that the *Mining Journal* is the medium through which announcements of this nature may be said to be universally made, I fear there was some cogent reason for the concealment. Why was not the paid local director present to report? Are not the committee of management in London paid for their services, if I mistake not, some 3000, or 4000, a year? And where were they? The report here is that they were "snowed up." I beg the word may not be misconstrued. One of the gentlemen, a projector and director, if I mistake not, is in the same house in Moorgate-street; another, hard by the Royal Exchange; and really it would only have been a compliment due to the proprietors who pay them for their valued services, had they at least presented themselves.

I am sorry to inform you that the schooner *Ann and Mary*, Captain Jones, which sailed early in the morning of the 8th inst., from Kenmare, with a valuable cargo of silver-lead ore (118 tons) from the Lansdowne Mines, near Kenmare, for the River Dee, was, early on the morning of the 9th, in a snow storm, driven into Spanish Cove, about a mile north of Crookhaven. It is reported that most of the cargo will have to be thrown overboard, in order to save the vessel. I hope so valuable a cargo (say 16000l.) is insured; and as the mines are worked by parties on your side the channel, as a private adventure, who are mercantile men, there can be but little doubt such caution has been observed. It is somewhat singular to find that the *Ann and Mary* has been driven in close to Irish Consols Mines. Spanish Cove being best recognised in the locality as the original name of the place, and as the latter mines have hitherto produced but little ore, I should not be surprised if, in the agent's next report, it will be said (as truly it may be) that they are "very near a rich deposit of mineral."

In my notice of Kenmare Mine, last week, stating that a call of 25l. per share had been made, it should have been stated that, with the 66l. 5s. previously paid, the full amount was 91l. 5s. per share. Muckna has also, I understand, made a call of 5l. per share.

**MINING IN FRANCE.**—The Minister of Agriculture, Commerce, and Public Works has lately published a very elaborate and interesting report on the mining industry of France from 1847 to 1852, both inclusive, which states the quantity of coal extracted during that period to have been, in round figures, as follows:—1847, 2,576,500 tons; 1848, 2,000,000 tons; 1849, 2,025,000 tons; 1850, 2,217,000; 1851, 2,242,600 tons; 1852, 2,462,000 tons; thus showing that the revolution of February, 1848, was decidedly unfavourable to the coal trade, the production for that year being but four-fifths of the preceding; and that even up to 1852 it had not recovered the shock which that event had given it. The importation during the same period had been:—1847, 1,274,300 tons; 1848, 1,071,400 tons; 1849, 1,197,000 tons; 1850, 1,416,600 tons; 1851, 1,463,400 tons; 1852, 1,548,000 tons; and the exportation:—1847, 265,700 tons; 1848, 244,600 tons; 1849, 188,450; 1850, 207,800; 1851, 173,900 tons; 1852, 206,800 tons. The variation having been in about the same proportion as regards the importation; but for the exportation there appears a greater tendency to diminish than to increase; and by the interior consumption, the amount of which is given below, it appears that the demand exceeds the supply, consequently the importation of foreign coal increases, whilst the exportation diminishes. In 1847, when the consumption was about 3,824,400 tons, the importation was but 1,300,000; and in 1852, when the consumption had increased to about 4,000,000 tons, the production decreased about 1,250,000 tons, and the importation was about 2,500,000 tons more than in 1847. The second part of the report treats of the produce of the metallurgical *usines*, and states that, in 1847, the mean price of charcoal iron was 18 1/2 frs., and of coke iron, 14 frs. 20 c.; and gradually fell, until 1850, when the prices were—charcoal iron, 12 frs. 70 c.; coke iron, 10 frs. 80 c. per cwt. In 1851, there was a slight re-action in charcoal iron, which rose to 13 frs. 60 c.; but coke iron continued to fall to 10 1/2 frs. In 1852, the former reached 14 frs. 70 c., and the latter 11 frs. 30 c. per cwt. Manufactured iron exhibited a still greater variation, the mean price being—In 1847, charcoal iron, 45 frs. 80 c.; coal iron, 36 frs. In 1848, charcoal, 40 frs. 20 c.; coke, 29 frs. 80 c. In 1849, charcoal, 37 frs. 80 c.; coke, 27 frs. 30 c. In 1850, charcoal, 36 frs. 90 c.; coke 25 frs. 30 c. In 1851, charcoal, 37 frs.; coke 26 frs. 60 c.; and, in 1852, charcoal, 42 frs. 30 c.; coke 27 frs. per cwt. The above figures show the disastrous influence of revolutions on industrial progress; and it is considered that if the minister's statistics had embraced 1853, they would have shown a great increase in the production of coals, and which is estimated at 2 1/2 millions to 3 1/2 millions of tons.

**LEAD MINING IN THE UNITED STATES.**—The extensive and important mining enterprises in Great Britain, which have contributed so largely to the wealth and power of this country, has no doubt in a great measure stimulated our brethren on the western side of the Atlantic to take measures, by a combination of capital, to develop those mineral resources which are known to extend over such vast areas in the United States. The Wheatly Mining Company is an association for such purpose, being the result of private enterprise by a few gentlemen in New York and Philadelphia, with Mr. Wheatly as manager, for working some valuable lead mines near Phoenixville, Chester County, Pennsylvania. The mineral right extends over 270 acres of land, on which have been already discovered three or four lodes of great promise. They commenced working early in 1851, with a 50-horse power pumping engine; the shaft is now down 50 fms., the adit driven on the course of the lode 221 fathoms, the 10 fathom level 208 1/2 fms., the 30 fms. level 79 1/2 fms., and the 40 fms. level 18 fms. The lode in the 40 fms. level is 2 to 4 ft. in width; and the amount of ore raised to the present time is 1800 tons; of 60 per cent. produce, the lead from which, deducting 20,000 for smelting cost, is estimated at 137,248, while the entire cost of labour, rent, machinery, buildings, &c., has been \$102,752 28c., showing that the produce has already considerably exceeded all costs and charges, including the permanent reduction works. All the necessary machinery, stamps, crushers, water-wheels, dressing-floors, &c., are complete, and it is considered that the time has now arrived for a new engine, of larger calibre. The average produce of the mine has been, according to Prof. H. D. Rogers, from 1 1/2 to 1 3/4 ton per cubic fathom; and Professor Siliman, in his report on the mineralogical department of the New York Crystal Palace, states advisedly that the sulphates and molybdates of lead from this mine are the most magnificent metallic salts ever obtained in lead mining; and unequalled by anything seen in the cabinets of Europe; Professor Wilson also, in his report to the House of Commons on the New York Industrial Exhibition, states that the collec-

tion from this mine comprised specimens rarely met with of the chromate, molybdate, chromo-molybdate, phosphate, arsenio-phosphate, sulphate and carbonate of lead in splendid crystals, with samples of galena and dressed ore. In America, generally, lead mines have been very superficially conducted, but these, under the management of Mr. Wheatly, are strictly carried out on the Cornish system. The captains and most of the miners are from Cornwall, and the draftsman and surveyor is from the Museum of Economic Geology, in Jermyn-street. Under such practical operators there is little doubt of success, and there is every prospect of these mines turning out a most profitable investment.

## MINES AND MINING—SECOND SERIES—No. IX.

BY EVAN HOPKINS, C.E., F.G.S.

Had one-tenth of the large amount of money which has been, and is still being, drawn from the public to carry on operations in the worthless quartz rocks, for the benefit of jobbers, been laid out in the collieries, iron mines, and slate quarries of England, it would have done more good to the permanent prosperity of the country than all the gold mining companies put together. For every one *real* good mine even (putting aside the deceptive quartz veins), that turns out good and profitable to the shareholders, there are twenty that are only kept for jobbing, or are rendered worthless to the shareholders, through mismanagement, incompetency, and selfish purposes, and sometimes owing to the appointment of persons who disgust everybody by their bad policy, incapacity, presumption, and misrepresentations.

Many good establishments have been worked at heavy losses for many years, through improper and injudicious interference on the part of those dangerous beings who are too often improperly appointed into very snug berths, where they rob all the credit which belongs to others, and put all blame on the shoulders of those who may be placed unjustly under them.

The question is, not how a concern can be made profitable, but what kind of plausible reports can be brought forward to soothe disappointed shareholders, and make them pull out fresh supplies, when wanted. About half a million sterling will shortly be applied for to keep up the above schemes, over which the shareholders have no control whatever, nor ever get at the real state of affairs. Indeed, shareholders and faithful agents are treated as if they were mere bagatelle-balls, to be played with for the exclusive benefit of what are called managers, or jobbers.

The *Times* may well say that the English community—the industrial masses, are losing their reasoning power—becoming degenerated and helpless, and allow themselves to be used and tricked by daring official jobbers, without attempting to arouse themselves, and resist such wholesale abuses as we see daily perpetrated. Let the public but take care of their pockets for a short time, and watch closely their own interest, the mock companies would soon starve, and those in charge of *bona fide* undertakings would have to change their sinful ways, or give up their posts to more honest and efficient men.

Amongst various tricks adopted to entrap the unwary and uninitiated capitalists, by which jobbing London managers are enabled to gull the public, and to supply themselves with the "ways and means," which must be guarded against, is the employment of those nameless and irresponsible persons, whose occupation is to write puffing paragraphs to the press, to attract attention at given periods. These deceptive paragraphs are sometimes, especially in the colonial press, placed in such conspicuous parts as almost to compromise the character of the paper in which they may appear. If the law of libel protects a mere individual from injury, arising from the use of strong expressions on bad conduct, what ought the law to be to protect the thousands that are ruined by the tricks of jobbing managers and their puffing agents?

I would respectfully submit to the consideration of editors the propriety of heading all paragraphs of the description above alluded to thus—"Advertisement." If this plan be adopted, the public would not have so much reason to say that such a journal or newspaper misleads them. Surely the press ought rather to protect the public, in preference to supporting private parties. It should take at all times an independent course, for the benefit of the community at large.

The present critical state of some of the Australian colonies, want of employment, commercial distress, and ruin to our importers, have been mainly brought on through the extravagances of the representatives of the above class of people—in the colonial press—which I foretold would come to pass. The gradual fall in the produce of gold was self-evident; and even the declining quantity which is now obtained is procured at an immense sacrifice of human labour. Political economists see what will be the natural consequence of such a state of things, if it is allowed to be continued.

As regards England, it is a notorious fact that the so-called gold mines—Britannia, Polimoro, &c.—and the wonders of the Berdan machine in producing gold, were brought to notice, and the public misled, by the nameless and irresponsible writers above alluded to; therefore, all men who have any regard for their purses should avoid them, and be guided only by authentic and disinterested communications.

**THE NEW COAL COMPANY.**—We briefly noticed this company last week, and, as we then observed, the vastly increased, and still increasing, price of that absolute necessary of life—coal—abundantly proves that the current supply is totally inadequate to meet the wants of the community. There are, however, wide fields of coal, of a quality inferior to none for household consumption, which the difficulty of access has long prevented from being worked, but which the extension of the rail has now laid open for the profitable investment of capital. The Forest of Dean, in Gloucestershire, is one of these districts, and it is with much pleasure we again call attention to the prospectus of a company, formed under the title of the East Dean Coal and Iron Mining Company, with a capital of 75,000l., in shares of 1l. each. Some time since we noted to our readers that such a company was starting into existence, and in our last and present Journals we publish its prospectus, to which we direct the attention of our readers. In addition to the information therein contained, we are enabled to say that the works have so far progressed towards completion that the quantity of 600 tons per week can be raised in far less time than therein stated, and that before next winter the raising will be increased to 2000 tons per week; so that there is no doubt of the ability of the company to keep faith with their shareholders, by the delivery to them of the quantity stipulated. To this part of the project we earnestly call the attention of our readers. It is in the power of every household to secure for himself his stock of coal, of most excellent quality, at the very lowest price, by simply investing the sum which this coal would cost him in shares of the company. Suppose, for instance, that his consumption is 12 tons a year, he purchases 12 shares. Three tons per quarter are delivered to him, and instead of the usual demand of cash on delivery, he is allowed his own reasonable time for payment; for the company, having the security of his shares, run no risk by granting the indulgence. The price charged him is 18s. per ton: he is allowed for every share 1 ton per annum, and at the end of three years he will have saved the price of his share, if he be not even considerably in pocket. We believe it to be the wish of the directors to give a decided preference to this class of shareholders, who, deriving the greatest advantages from the undertaking, will most probably be permanent ones; but, at the same time, there are great advantages held out to those whose object is simply the profitable investment of surplus capital. Low as the price of the coal to the shareholder is, there remains a profit therefrom of 3s. per ton; and we have still to call attention to the remaining portions of the prospectus, all of which show sure indications of profit from the iron mines of the company, both immediate and in prospect, the extent of which we seem to fear to calculate; for it appears that the quality of the ore is so rich (it contains an average of 60 per cent. of pure metal), and the getting by tunnel in lieu of shafting so inexpensive, that the minimum profit of 5s. per ton must be a very modest calculation. We will only add that the royalties to the Crown are the lowest we have heard of, for we have been accustomed to hear of as many shillings being paid in Staffordshire as there are here pence. The directory is composed of gentlemen well versed in the coal and iron trades, and others of long standing as tradesmen in their respective vicinities, and to such the interests of their neighbours may be safely entrusted.

**THE SUBMARINE ATLANTIC TELEGRAPH** is now fully under way, and the last doubt is removed about its final completion. Six hundred men have been employed for a year in its construction from New York City to St. John's, Newfoundland, to which point (1200 miles) it is nearly completed. In a short time European news will be received, by St. John's, in five or six days from the Old World regularly; and before two years have gone by, intelligence will be flashed regularly every hour from London to New York.

## WEEKLY LIST OF NEW PATENTS.

WEEKLY LIST OF PATENTS SEALED.

J. Coates: Railways.—J. Fenton: Axles, shafts, rods, and bars.—J. Webster: Changing the direction of and multiplying motion.—A. E. Schmersahl and J. A. Bouck: Sulphuric acid.—J. Gregory and A. P. How: Steam-engines.—J. H. Johnson: Electric telegraph.—R. A. Brooman: Power accumulator to be used with hydraulic presses.—G. Bell: Air springs.—R. Mallet: Hollow shot and shells.—W. Onion: Gas stoves.—G. Price: Iron-safes.—J. B. Delguay-Malavas: Motive-power.—A. E. L. Belford: Forging nuts and washers.

## APPLICATIONS FOR PATENTS, AND PROTECTION ALLOWED.

A. B. Bérard, Paris—Improvements in the manufacture of gas, coke, and other products from coal, and in apparatus for that purpose.  
R. A. Brooman, Fleet-street—Improvements in obtaining motive-power.  
W. Wain, Brunswick-street, Stamford-street—Improvements in the construction of screw propellers.  
R. C. Witty, Toriano-avenue, Camden-road-villas—Improvements in illumination by means of artificial light.  
H. Smith, Southwick—Improvements in the manufacture of wrought-iron wheels.  
S. Kershaw and J. Taylor, Heywood—Improvements in carding engines.  
W. V. Greenwood and J. Saxby, Brighton—Improvements in signal-lamps.  
S. T. Jones, Union-court, Old Broad-street—Improvements to reduce and wash minerals to extract metal therefrom, especially gold.  
R. Macallister, Glasgow—Improvement in fitting or applying screw propellers to ships and vessels.  
J. H. Johnson, Lincoln's Inn-fields—Improvements in the manufacture of railway and other wheels; also, Improvements in electro-magnetic engines.

**IMPROVEMENTS IN RAILWAY AXLE BOXES.**—In the ordinary construction of railway axles, and the journals bearings, whatever care may be taken, there will be a continuous wear; and an injurious end play and side oscillation of the carriage is the result. Mr. Barrans, of the establishment of Messrs. R. and T. Hughes, Railway Foundry, New Cross, has patented an adjustable arrangement for keeping the axles of engines and carriages from acquiring this end play and side oscillation, the carriages steady on their axles, the bearings always in right position, avoiding gradual wear, and to prevent the necessity of continually taking out and changing the bearings and guide plates. It consists of an iron frame, fixed to the bearing of the carriage, in which is an adjustable brass filling piece, passed through an orifice in the centre. This filling piece has a long slot in the centre—the upper surface being serrated with notches cut to the sixteenth of an inch, on which fits a nut, notched in like manner—the whole being kept in place by a bolt and nut. By this arrangement, the adjustable filling piece can always be regulated at a proper working distance from the end of the axle, prevents all oscillation of the carriage, or unnecessary wear, and all grit, or dirt, is prevented from getting into the rubbing surfaces of the journals, or bearings. These boxes have been adopted with great advantage on the entire of the Great North of Scotland Railway, amounting to upwards of 1600 wheels; and the proprietors have certificates from Mr. G. H. Birbeck, and Mr. James Cudworth, of the South-Eastern, Mr. J. C. Craven, of the London, Brighton, and South Coast Railway, as to the complete efficiency of the arrangement. On the former, the leading wheels of No. 37 engine was fitted with Barrans's patent box, and, having run 25,698 miles, it was found that the brasses sideways had worn only 1-16th of an inch; while the slide and axle boxes showed no symptoms of wear. There were afterwards applied to the driving-wheels, when the engine travelled 15,494 miles, with like results. On the last-named railway the engine Nos. 24 and 69 were fitted, and the former having run 34,713 miles, the bearings were worn less than 1-16th of an inch; while the bearings of the trailing wheels with the ordinary boxes were worn at least three-eighths of an inch; and the guide plates were also worn to a considerable extent. No. 69 had run over 27,877 miles; the ends had only worn 1-16th of an inch, and the bearings and guide plates presented no signs of wear. It is intended to exhibit in the Crystal Palace, at Sydenham, a series of specimens of worn axles and bearings on the ordinary plan, and also some with Barrans's patent box, to prove the efficacy of the plan in preventing all oscillation, and the various mischievous consequences arising from wear of the axle bearings, and the end play resulting from it. These will consist of a Barrans's railway axle box after three months' work; a set of ordinary boxes to which the improvement had been fitted, running 13 months with the mail-train on the South-Eastern lines; another set which have worked 24,500 miles; the bearings mentioned above, which run 25,698 miles, and 15,494 respectively, with various other specimens, and a model of a railway truck fitted with Barrans's improvements. Messrs. Hughes state there has never been a heated bearing, or complaint of oscillation, during the working of Barrans's patent, properly lubricated.

**RAILWAY TYRES.**—Mr. Brotherhood, of the Railway Works, Chippenham, has manufactured a wheel, which is so constructed, as to render it impossible for any portion of the tyre to be thrown off, even if fracture occur in several places. A set of wheels made upon this principle has been running some months upon the Great Western Railway, through the tyre of which an opening was cut 1/4 in. wide, prior to their being put on the line; and although they have sustained an average daily load of 10 tons, their appearance is as sound and efficient as when first in use.

**IMPROVED MACHINE FOR DRILLING STONE.**—Mr. F. Davidson, of Petersburgh, United States, has patented improvements in machinery for drilling or boring stone, consisting of a new combination of parts for the purpose of catching hold of the drill bar and letting it go, either to form the hole, by its own gravity, or by the aid of springs to increase the momentum. The drill-bar has a catch-block of cast or wrought-iron, capable of sliding freely on the bar. It is slotted on one side to receive a dog, pivoted on it, and connected at its tail with a chain, passing over a chain at the top of the machine, and attached at the other end to a drum on the working shaft. This chain passes round a guide in the catch-block, and acts on the dog in such manner that when it is not under other control the weight of the catch-block draws the dog towards it, and makes it bite the drill bar, the additional weight of which tightens the bite, to enable the bar to ascend by the revolution of the crank. There is a trigger connected with the dog, and a stop at top and bottom of the guide frame, by the action of which the drill is made to turn horizontally at every blow, and to be raised and lowered rapidly, solely by the action of the working shaft.

**GIGANTIC CANNON.**—The largest gun in the world is at Rajapoor, in the East Indies, and weighs 40 tons; it is said to be capable of holding five persons seated, without much crowding. It was once fired off as a salute, and though only half the quantity of powder was put in which the chamber would hold, the concussion shook houses, domes, and towers to their foundations, and the terrified inhabitants rushed out, expecting to be overwhelmed by the falling buildings, survivors of former shocks.

## RAILWAY TRAFFIC RETURNS.

ENGLAND.—Subjoined are the traffic returns of the various English lines for the last week:—			
	1855.	1854.	
London and North-Western	£44,055	£47,727	
Lancashire and Yorkshire	17,154	17,747	
London and South-Western	9,383	10,620	
Great Western	20,150	19,961	
London and Brighton	8,104	9,431	
Midland	24,021	25,816	
South-Eastern	10,262	12,190	
Great Northern	17,762	19,707	
Chester and Holyhead	3,898	3,829	
North-Eastern	28,376	28,376	
Manchester, Sheffield, and Lancashire	7,170	7,508	
East Anglian	6,700	7,022	
Eastern Counties, Norfolk, and Eastern Union	18,167	18,641	
East Lancashire	4,554	4,929	
Bristol and Exeter	4,650	4,916	
Exeter and Crediton	119	82	
Shropshire Union	678	683	
Birkenhead, Lancashire, and Cheshire Junction	1,776	1,993	
Manchester and Salford Junction	2,200	2,301	
Oxford and Worcester	2,300	2,301	
Newcastle and Carlisle	2,730	2,502	
South Yorkshire	1,072	1,300	

These figures show the following aggregate results:—

	Receipts.	Miles open.	Average per mile.
1855	£226,123	4663	£48 9 10
1854	230,957	4525 1/2	53 0 6

The comparison of the traffic is again decidedly unfavourable. The decrease, however, is due in part to the present severe weather.

SCOTLAND.—The returns on Scotch lines are:—			
	1855.	1854.	
Aberdeen	£1,860	£1,897	
Caledonian	10,216	9,469	
North British	4,573	4,043	
Edinburgh and Glasgow	4,329	3,661	
Scottish Central	2,440	1,895	
Glasgow and South Western	4,851	4,900	
Total	£37,968	£36,741	

IRELAND.—The Irish returns are:—			
	1855.	1854.	
Belfast and Rathfriland	£ 633	£ 775	
Belfast and County Down	215	213	
Londonderry and Enniskillen	490	386	
Londonderry and Coleraine	192	209	
Dublin and Belfast Junction	836	810	
Great Southern and Western	5,217	4,738	
Waterford and Kilkenny	139	136	
Total	£7,723	£7,267	

The Traffic Returns of Railways in the United Kingdom amounted for the week ending Feb. 10 to 300,585l., and for the corresponding period of last year to 311,625l., showing a decrease of 11,040l. The gross receipts for the eight railways having their termini in the metropolis amounted for the week ending as above to 129,472l.; and for the corresponding week of last year to 138,886l., showing a decrease of 9413l.

The decrease on the Eastern Counties Railway amounted to 475l.; on the Great Northern to 1945l.; on the London and North-Western to 3690l.; on the London, Brighton, and South-Coast to 1327l.; on the London and Blackwall to 98l.; on the London and South-Western to 637l.; and on the South-Eastern to 1929l.; total, 10,101l.; but from this must be deducted the increase of 688l. on the Great Western, showing a decrease as above of 9413l.

The receipts on the other lines in the United Kingdom amounted to 171,113l., and for the corresponding period of 1854 to 172,740l.; showing a decrease of 1627l. in the receipts of these lines, which, added to the decrease on the metropolitan lines, makes the total decrease 11,040l., as compared with the corresponding week of 1854.



of formation, and expected to be finished during the ensuing season.  
 Mr. PETER MORRISON, overseer at Monale, will show the wood, and offers it  
 received, for the whole in one lot, by Messrs. DAVIDSON and SONS, W.S., Edinburgh,  
 or by Lockhart Morrison, Esq., civil engineer, Pitt Street, Edinburgh; or by  
 Mr. LARSEN, banker, Crieff, who will also give any other information required.  
 N.B. If not sold by private bargain on or before the 1st of March, the wood will  
 be exposed to public sale, in lots, on Wednesday, the 18th of April next.  
 Monale Castle, Jan. 12, 1855.



## EAST DEAN COAL AND IRON MINING COMPANY.

Provisionally Registered pursuant to 7 and 8 Vic., cap. 110.  
Capital £75,000, in shares of £1 each.—Deposit 10s. per share.

JOHN BAKE, Esq., Cambridge-terrace, Barnaby.  
ARTHUR OWEN DAVIES, Esq., Downland-terrace, Glamorgan-shire.  
JAMES HODGES, Esq., 3, Castle-street, Falmouth-square.  
B. H. MIDDLETON, Esq., 10, Cambridge-terrace, Liverpool-road.  
THOMAS MILLS, Esq., 20, Felix-place, Liverpool-road, Lillingston.  
R. J. MOSTYN, Esq., Calcutt-hall, Flintshire.  
JAMES SIMMONS, Esq., 63, Westbourne-grove, Bayswater.  
GEORGE HATHAWAY SMITH, Esq., West Bromwich, and Wrexham.  
GEORGE HATHAWAY TURPIN, Esq., Angel-terrace, Lillingston.  
AUDITORS—Charles Ingall, Esq., 7, New Bank-buildings, Lothbury; Charles F. Wagner, Esq., 11, South-avenue, Bedford-square.  
SOLICITORS—Messrs. Abbott and Driver, 13, Birehlan-lane.  
BANKERS—The Union Bank of London.  
SECRETARY—Mr. Wilmer Hollingworth.

OFFICES.—5, FALCON SQUARE, CITY, LONDON.

This company is formed for the raising of coal and iron ore; and eventually, if deemed advisable, for the smelting and manufacturing of pig-iron, and also of tin plates in the Forest of Dean, Gloucestershire.

The coal field (comprising the Rose in Hand and part of the Royal Forester Gales) is estimated to contain a superficial area of 650 acres, or about 9,400,000 tons of coal block of the best quality. There has been a considerable outlay in plant; two shafts are already sunk to the coal, one steam-engine erected, and a tramway, 440 yards, made from the pits to the Severn and Wye Railway, and thence to the town and port of Lydney. There is also a level driven through the measures, 600 yards and upwards in length, which will drain off the land-water to a depth of about 150 feet, and save, to that extent, the pumping from the pits, thereby materially lessening the expense, by not having to raise the water to the surface. With an outlay of about £3000, a pumping-engine can be erected, and all repairs necessary to be done before opening the works completed. It is calculated, that in six months the company will be in a condition to raise 600 tons of coal per week. This quantity will meet with a ready sale, and the minimum profit obtained will be 3s. per ton at the pit's mouth.

These coal fields are only 134 miles distant from London, and are in direct railway communication with the South Wales, Great Western, Midland and South-Western lines. These companies are prepared to conduct the traffic on most favourable terms. The excellence of the coal is fully established; it comprises every variety that can be required for household or manufacturing purposes. It is much in demand for private consumption, as well as for smelting, cooking, gas works, and steam-engines, both at its own locality, and at towns along the above railways.

A substantial reason for anticipated success, is supplied by the present condition of the coal trade. Proofs abound on every hand that the present supply of fuel is utterly inadequate to the increasing demand, and every year must necessarily enlarge that disparity. The export trade is expanding rapidly, and the company's coal will certainly command a large and lucrative sale in London. It is clearly shown that the public favour the system of land transit, from the enormous and increasing coal traffic carried on by the Great Northern, North-Western, and Eastern Counties Railway.

This undertaking is intended to have the character of a "Household Coal Company;" and in accordance with that intention, each shareholder will become entitled every year, after the company's coal works are in full operation, to have delivered to him, in any part of the metropolis not exceeding three miles from the Paddington station, 1 ton of best household coal for every share, at a fixed price of 18s. per ton; holders of ten shares or upwards may receive their proportions in separate quarters of the year. The recollection of the enormous prices obtained for coal during the last severe winter, and the present high rates, afford the shareholders of the East Dean Coal and Iron Mining Company a prospect of a large and profitable return for their capital.

The Drybrook iron mine, 72 acres in extent, contains an inexhaustible supply of iron ore. It is situated on the land side, consequently near the surface, and has but little water to contend with; the ore can, therefore, be raised at much less expense than from the deeper mines in the Forest.

It is proposed to drive a tunnel from the Severn and Wye Railway near Lydbrook as a drain and roadway to the iron ore, which will put the company in a condition to get 600 tons per week; the demand for it is unlimited, at a price which will leave a minimum profit of 5s. per ton. This ore being very rich, and of a most superior quality, containing on the average 60 per cent. of metal, is very much in request both in Wales and in Staffordshire, and will readily fetch prices varying from 22s. to 25s. per ton, delivered there.

Should it be decided by this company hereafter to erect two blast furnaces for the smelting and manufacturing of pig-iron: the estimated cost of the same, including engines and tram-roads, &c., is £15,000. These two furnaces, when completed and in full work, will produce 9600 tons of pig-iron per annum, at a profit of £2 per ton. It is well known that the Forest of Dean abounds with limestone, sandstone, and fire-clay, portions of which will be required in the erections, and in the manufacture of pig-iron.

The iron manufactured in this immediate district is acknowledged, by the most competent judges, to be of a quality superior to the Welsh or Staffordshire make. It is peculiarly adapted for the plates, and for all kinds of outlay purposes: a large quantity is purchased annually by the Welsh and Staffordshire manufacturers, at an advance of 4s. to 5s. per ton above the market prices of their own make.

This company will possess the great advantage of having upon their own estate every material necessary for the manufacturing of pig-iron, thus enabling them to produce the iron from 10s. to 15s. per ton cheaper than the makers above referred to; and the mines are situated in the very best position for attaining the realisation of a large profit upon the amount of capital employed.

These mines are held under direct grant from the Crown, subject to a royalty of 3d. per ton upon the iron ore, and 2d. per ton on the coal; the vendors have agreed to accept for their interest therein the sum of £60,000, payable in the following manner:—£6000 in paid up shares of the company; £7000 in cash on the 1st of May, 1855; and the remaining £47,000, with interest from that date at the rate of 5 per cent. per annum, to be paid off by instalments ranging over a period of ten years.

It is calculated that, when the works are properly opened, the coal can be raised for 4s. 6d. per ton, and the iron ore for 5s. per ton. Estimating, therefore, the minimum profit of 5s. per ton upon the iron ore, and 5s. upon the coal, there will be a net profit of 15 per cent. per annum to the shareholders.

It is proposed, therefore, to raise a capital of £75,000, in shares of £1 each, of which the vendors have consented to become holders of 8000 shares, as above.

The directors propose to make two calls of 5s. each, at such times as may be necessary to prosecute the works; but such calls will not be made at intervals of less than four months between each call.

The directors reserve to themselves power to commence business without being compelled to allot the whole of their shares.

Applications for shares to be made to the secretary at the company's offices.

## FORM OF APPLICATION FOR SHARES.

To the Directors of the East Dean Coal and Iron Mining Company.

GENTLEMEN,—I request you to allot me \_\_\_\_\_ shares in the above company, and thereby undertake to accept the same, or any less number that may be allotted to me, and to pay the sum of 10s. per share thereon, and execute the Deed of Settlement of the company when required so to do.

Name \_\_\_\_\_ Address \_\_\_\_\_ Profession or occupation \_\_\_\_\_

## UNDER HER MAJESTY'S ROYAL LETTERS PATENT.

## INDURATED STONE COMPANY.

INDURATING AND RENDERING IMPERVIOUS STONE, BRICKS, TILES, AND OTHER BUILDING MATERIALS.

(Completely Registered, 29d of December, 1854.)

The company is now in a position to execute orders, and grant licenses for the use of their valuable patent. The great advantage to be derived from the use of their valuable patent, the great advantage to be derived from the use of a material, not only durable but also impervious to all.

The saving to the country, were this stone adopted for public works, such as docks, bridges, &c., would be very considerable, as local materials could be used, and the enormous cost of granite and other hard stones be rendered unnecessary.

The indurated stone is especially adapted for monumental purposes, vaults, catacombs, &c.; and an average saving of from 25 to 50 per cent. would be effected by its adoption in lieu of the materials generally used.

For sculpture and other works, where considerable labour is expended, the advantage of this stone is pre-eminent, as the finest work can be executed in sandstone, and become impervious to the weather, without any loss of time or expense.

The stone will also bear a brilliant polish, thereby rendering it essential for a variety of ornamental purposes.

Applications for shares will be received to the 27th inst., at the offices of the company, 14 and 15, St. Swinburn-lane, London, and High-street, Tunbridge Wells, where specimens may be seen, and any information relative to the patent obtained; and at Messrs. PAGES and HODKINSON, solicitors, 71, Mark-lane.

## FOREIGN VINEYARD ASSOCIATION.

Completely registered, capital £200,000, in 10,000 shares, for the supply of

Wines to Private Families, Hotels, Messes, Clubs, &c.

CHAIRMAN—The Right Hon. Lord MURKERT, Carlton Club.

With six other directors from the principal Clubs of London.

MANAGER—T. W. STAPLETON, Esq., 51, King-street, Regent-street.

The wholesale scale of prices is adopted by this company. All wines will be strictly of the growths represented, and in every case pure. Private families can have same in large or small quantities, for prompt payment, after receipt and approval of supplies.

Examples of advantage in prices:—The finest Epernay Champagne, hitherto charged 210 10s., now 25 5s. per case of 36 quarts; Most and Chandon's first quality (direct from the firm), hitherto £12 12s., now 59 9s.; Claret, the finest Chateau R. Margaux, or Chateau Brane Cantenac, both under lease to the company, formerly £12 12s., now 44 4s.; Sherries, formerly 36s., now 28s. per dozen; French Xeres imported, 25s., now 44s.; Ports in same ratio; finest Cognac, pale or brown, 25s. per gallon.

THE PERMANENT WAY COMPANY beg to call the attention of

civil engineers, contractors, and others interested in the construction of railways to the PERMANENT WAY OF IRON, by which a SAVING may be effected

of nearly £300 per mile, single line, in the adoption of Mr. W. H. BARLOW'S

PATENT WROUGHT-IRON PERMANENT WAY, over that of the ordinary road.

Every information can be obtained on application to WM. HOWDEN, Secy.

26, Great George-street, Westminster.

ASSAYING.—CITY SCHOOL OF CHEMISTRY AND ASSAY

OFFICE, DUNNING'S ALLEY, BISHOPS-GATE STREET WITHOUT.

Conducted by Messrs. MURKERT, F.R.S., Author of Manual of Practical Assaying, Manual of Agricultural Analysis, Treatise on the Analysis of Food, Metallurgical Papers, &c. ASSAYS AND ANALYSES OF MINERALS, METALS, and every manufacturing product.

SPECIAL INSTRUCTION IN ASSAYING AND CHEMISTRY for gentlemen, in

order to proceed to the colonies.

Enquiries respecting scale of fees, &c., to be addressed as above.

TO MINING COMPANIES, AND ALL CONNECTED WITH

STEAM-POWER, PLANS, SPECIFICATIONS, with ESTIMATES of ALL

KINDS OF CONSTRUCTION, comprising of the most approved modern

principles and economical principle, may be obtained at the offices of Messrs. PAGES and General Contractors, Cannon-street Chambers, Cannon-st., City, London.

## RAILWAY WAGONS.—WM. A. ADAMS, MIDLAND WORKS,

BIRMINGHAM.

BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.

IN STOCK—FOR SALE OR HIRE.

## GRIFFIN AND HENSON, RAILWAY CARRIAGE AND

WAGON BUILDERS, SOHO, BIRMINGHAM.

MANUFACTURERS OF EVERY DESCRIPTION OF IRONWORK FOR RAILWAY

CARRIAGES AND WAGONS.

## RAILWAY WHEEL AND AXLE WORKS.—

R. GEORGE WORSDELL AND CO., WARRINGTON, MANUFACTURERS

OF EVERY DESCRIPTION OF HAMMERED IRON, TYRES, AXLES, &c.

THOS. SPENCER, VULCAN IRONWORKS, WEST BROM-

WICH, STAFFORDSHIRE, MANUFACTURER OF RAILWAY WHEELS

AND AXLES, SCRAP TYRES AND AXLES, ALL KINDS OF HAMMERED IRON

FOR MARINE AND OTHER ENGINES, SHAFTS, AND HEAVY IRONWORK.—SOLE

MAKER OF CAMBER'S PATENT WROUGHT-IRON RAILWAY WHEELS.

INGLIS AND CHISHOLM, MANCHESTER, MAKE SMALL

STEAM-ENGINES FOR MINERS, CONTRACTORS, &c.; also, DRILLING,

PUNCHING, AND SHEARING MACHINES, AND OTHER TOOLS, of the best quality,

at a reasonable price.—Address, INGLES and CHISHOLM, Charles-street, Garratt,

Manchester.

## CLECKHEATON IRONWORKS, YORKSHIRE.—

JOHN TAYLOR, MANUFACTURER OF ALL KINDS OF FORGINGS FOR

LOCOMOTIVE, MARINE, AND OTHER ENGINES, HEAVY SHAFING, ARM

MOULDS, AND ALL OTHER COUNTRY FORGINGS.

TO IRONMASTERS, MERCHANTS, CONTRACTORS,

FOUNDERS, &c.—Messrs. DAUNT and MOFFAT, METAL BROKERS, 50,

ST. VINCENT STREET, GLASGOW, OFFER THEIR SERVICES FOR THE PUR-

CHASE AND SALE OF PIG AND MANUFACTURED IRON.

All orders carefully executed, and prompt shipments made.

NORRIS'S PATENT RAILWAY CHAIR COMPANY beg to draw

the attention of railway companies and engineers to NORRIS'S PATENT

RAILWAY JOINT CHAIRS. This patent has received the unqualified approbation

of some of the most eminent engineers of the day, as the most effective, economical,

and perfect joint in use at the present time. The simplicity of its construction is such

as will allow of its application to any line of railway, without causing the slightest

hindrance to the ordinary traffic during the time that it is being laid down.

The saving in the preservation of the permanent way and rolling stock by the ap-

plication of Norris's Patent is incalculable; and wherever adopted must very con-

siderably decrease working expenses.

To railway companies, having old and bad roads, the principle is peculiarly advan-

teous, as its application will not only restore the road to a perfectly safe and ser-

vicable state for many years, but, at the same time, bring into efficient use all the

old and broken chairs.

To the railway world in general it is of the greatest value, as it admits of the easiest

locomotion, and is most simple and economical in principle.

Every information will be given, and models forwarded for inspection, on applica-

tion to the manager, at the offices of the company, Wolverhampton.

MESSRS. GWYNNE AND CO. are PREPARED TO GRANT

LICENSES FOR THE REDUCTION OF IRON, COPPER, LEAD, TIN, AND

OTHER ORES, FUSING AND REFINING METALS, CEMENTATION OF STEEL,

&c., by their NEWLY PATENTED PROCESS. Results can be produced in less than

the time at present required, and it is expected eventually in practice it will

not exceed one-third, reducing the cost of the best steel to one-half the present price,

with a corresponding saving in time and reduction in price in all other metals.

Messrs. GWYNNE and Co. are also PREPARED TO GRANT LICENSES FOR THE

MANUFACTURE OF THEIR NEW AND POWERFUL FUELS, superior to all others

yet brought before the public, in their increased heating and calorific value, their

entire freedom from spontaneous combustion, their density and compactness of form,

and in their great economy of first cost, by the improved modes of manufacture.

Machinery for the complete manufacture of 1 to 50 tons of this fuel per hour may be

procured from Messrs. Gwynne and Co. Samples of the fuel may be inspected, re-

ports on its value, and all information, can be had by applying to Messrs. GWYNNE

and Co., engineers, Essex Wharf, Strand, London.

TO ENGINEERS, MILLWRIGHTS, AND OTHERS.—

PETER ROTHWELL JACKSON'S MACHINE FOR MOULDING SPUR AND

OTHER WHEELS (without wheel patterns) IS NOW AT WORK, and he can SUP-

PLY WHEEL CASTINGS of any diameter, pitch, number, breadth, or form of cog,

on reasonable terms, WITHOUT ANY CHARGE FOR PATTERNS. This method

of moulding produces wheels of a superior quality, and will be found very valuable

when a change of speed is required, or to replace broken wheels with others of

stronger proportions.

P. R. JACKSON also HOLDS A LICENSE TO MANUFACTURE RAMSBOTTOM'S

PATENT METALLIC PISTONS, which for lightness, cheapness, simplicity, and

efficiency, he can with confidence recommend.

References to parties who have the patent wheels and pistons at work, and any

other information as to prices, or licenses to manufacture them, may be had on ap-

plication at the Salford Rolling Mills, Manchester.

TO ENGINEERS, MILLWRIGHTS, SHIPBUILDERS, &c.—

T. W. BLACKETT, ENGINEER, CROSBY HALL CHAMBERS, BISHOP-

GATE STREET, LONDON, has FOR SALE, and READY FOR DELIVERY, various

ENGINEERING TOOLS, comprising large and small drilling and boring ma-

chines, self-acting screw-cutting lathes, hand lathes, planed iron beds and compound

slide rests, shaping and planing machines, and other useful tools. Particulars for-

warded on application.

KENTLEDGE ALWAYS IN STOCK, OR MADE TO BUYERS'

OWN SPECIFICATION.—Apply to WILLIAM F. SIM, Sweeting-street, Liver-

pool.—N.B. Old Kentledge bought.

VENTILATION OF COAL MINES.—BIRAM'S PATENT

ANEMOMETER (Price, 12 in., £4 4s.; 6 in., £3 3s.) TO BE OBTAINED

OF THE MAKER, JOHN DAVIS, Mathematical Instrument Maker, Derby.

Dials, Levels, Pit Barometers, and all accessories pertaining to the engineer.

PATENT SAFETY FUSE.—THE GREAT EXHIBITION PRIZE

MEDAL WAS AWARDED TO THE MANUFACTURERS OF THE ORIGINAL

SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform

Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting

Operations, that, for the purpose of protecting the public in the use of a genuine arti-

cile, the PATENT SAFETY FUSE has now a thread wrought into its centre, which,

being perfectly right, infallibly distinguishes it from all imitations, and ensures the

integrity of the gunpowder.

This Fuse is protected by a Second Patent, is manufactured by greatly improved

machinery, and may be had of any length and size, and adapted to every climate.

Address.—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON and CO., PEN-

HALICK, near REDRUTH, CORNWALL, MANUFACTURERS OF FUSE,

of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to

the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.

Messrs. BRUNTON & CO. are at all times PREPARED TO EXECUTE UNLIMITED

ORDERS FOR SUPPLYING FUSE direct from their own MANUFACTURE, upon

warrant that it will prove equal to, if not better, than any to be procured elsewhere.

ROPE MANUFACTURE.—THOMAS DAVEY, PHOENIX ROPE

WALK, TUCKINGMILL, CORNWALL, MANUFACTURER of every de-

scription of SAILING and SHIPPING CORDAGE on an IMPROVED PATENT

PRINCIPLE, now OFFERS ROPE of the best quality at a considerable REDUCTION

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